

# Exhibit 107

**Subject:** Dock System files, Westpoint Harbor

**Date:** Tuesday, June 14, 2011 6:40 PM

**From:** Mark Sanders <mark@westpointharbor.com>

**Reply-To:** <mark@westpointharbor.com>

**To:** Tom Sinclair <toms@bccdc.ca.gov>, "mark@westpointharbor.com" <mark@westpointharbor.com>

Tom,

Bellingham Marine was able to compress the entire AutoCad file for the Dock System at Westpoint Harbor. Its attached in PDF format so you can open it easily to view as was the others sent by disk.

The design and bid process for the docks by Bellingham Marine Industries started back in 2002, and revised to include single-loaded slips and pumpout at every berth. This (2006) version was provided to BCDC in hard copy and is the source document for the drawings in BCDC's amendment 3 package (developed by Michael Smiley (BMS Design) and Peter Bohley (Bohley Consulting/civil engineers)).

mark

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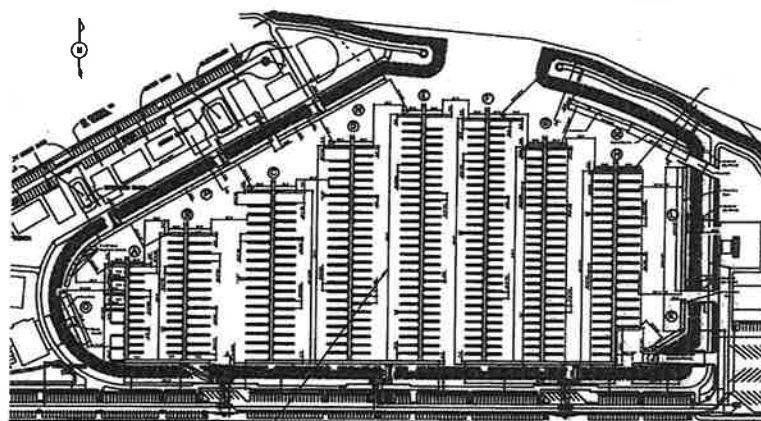
**Westpoint Marina**  
Redwood City, Ca.

### Vicinity Map



## PROJECT LOCATION

### Site Plan



### AREA OF WORK

## ADA ACCESSIBLE SLIPS

TOTAL BOAT SLIPS IN FACILITY	MINIMUM NUMBER OF REQUIRED ACCESSIBLE BOAT SLIPS
1 to 25	1
26 to 50	2
51 to 100	3
101 to 150	4
151 to 300	5
301 to 400	6
401 to 500	7
501 to 600	8
601 to 700	9
701 to 800	10
801 to 900	11
901 to 1000	12
1001 and over	12 plus 1 for each 100 or fraction thereof over 1000

— All Signs ADA  
Compliant

\* In Accordance With The Americans With Disabilities Accessibility Guidelines (ADAAG) 15.2 Which Addresses Recreational Boating Facilities.

**WARNING:**

**WARNING:**  
BELLINGHAM MARINE INDUSTRIES  
HAS BEEN NOTIFIED BY ITS WOOD  
PRESERVERS, THAT THE CHEMICALS  
USED IN THE WOOD TREATMENT  
PROCESS ARE KNOWN TO CAUSE  
CANCER.

**CAUTION:**

**CAUTION:**  
FLOAT SYSTEMS ARE UNSTABLE WHEN PLACED IN WATER PRIOR TO ASSEMBLY IN THEIR FINAL INTENDED CONFIGURATION. MODULES OR SUBASSEMBLIES SHOULD BE HANDLED WITH CARE DURING INSTALLATION AND SHOULD NEVER BE STOOD OR WALKED UPON PRIOR TO FINISHED ASSEMBLY.

## TABLE OF CONTENTS

[illegible]

**Project Address:**  
1529 Seaport Blvd.  
Redwood City, Ca. 94063

**Method Designer**  
**Brian Bateman**

**Budget Boat Contractor:**  
**Bullingham Marine Industries, Inc.**  
 1205 Business Park Drive  
 Dixon, CA 95620  
 ph. 707.578.2385  
 fax 707.678.1760

LC #442490  
A, C10, C16

**Radpoint Structures, P.S.**  
1801 F Street  
Bellingham, WA 98225  
ph. 360.715.0121 fax 360.752.1502

**Bellingham**  
**MAINTENANCE**  
 Increasing labor  
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 Specialized Division  
 1500 Bellingham Park Drive  
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## UN-FLOAT

City of Redwood

REPORT NO.	XXX	XX	XX
REPORT NO.	100-100000	XX	XX
DATE OF	1-1-1967		
ISSUED ON	-		
DATE	10-25-67		

CS1

CS1

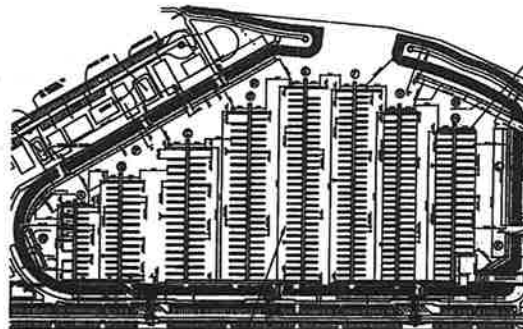
@	at	LN	Lineal/lineal
Ⓜ		LG	Long
A.C.O.E.	Army Corps of Engineers	LL	Live Load
ALUM	Aluminum	LL	Lock Washer
	by	M.L.L.W.	Mean Lower Low Water
B	Below	MAX	Maximum
BD	Board	MB	Machine Bolt
BM	Beam	MDPE	Medium Density Polyethylene
CB	Carriage Bolt	MFR	Manufacturer
C-C	Center Line	MM	Millimeter
C-C	Center to Center	MIN	Minimum
CF	Cubic Foot/Foot	N.I.C.	Not In Contact
G.I.P.	Cast In Place	NO.	Number
CLR	Clear	<i>Ⓜ (after number)</i>	Number
CONC	Concrete		New
CONT	Continuous	O.A.	Overall
CW	Cut Washer	O.C.	On Center
C.Y.	Cubic Yard	O/O	Out-to-Out
	Degrees	OPP.	Opposite
Ø	Diameter	%	Percent
DP	Drop	±	Plus or Minus
DWG	Drawing	PL	Plate
DET.	Detail	PCF	Pounds per Cubic Foot
DIA.	Diameter	P.O.C.	Point of Connection
D.L.	Dead Load	PSI	Pounds per Square Inch
ELECT	Electrical	PVC	Polyvinyl Chloride
ELEV. or EL.	Elevation	PW	Plate Washer
EXIST.	Existing	REINF.	Reinforced, reinforcement
EA	Each	REQD	Required
EXP	Expansion	RSP	Roof Slope Protection
FB	Flat Bar	SQ.	Square
FH	Flat Head	SF	Square Foot
FW	Finish	SIM	Similar
FT	Foot	SHT	Sheet
FN	Flat Washer	S.S.	Stainless Steel
GA.	Gage	T.O.C.	Top of Concrete
GALV	Galvanized	T.O.S.	Top of Slope
GLB	Glué Laminated Beam	TYP.	Typical
H.D.G.	Hot Dip Galvanized	THK	Thick
HDPPE	High Density Polyethylene	UHMW	Ultra High Molecular Weight
HDPE	Hardwearing	VERT	Vertical
HN	Hex Nut	W.W.M.	Welded Wire Mesh
IN.	Inch(es)	w/	with
LBS	pound(s)	W.	Wide
<i>Ⓜ (after number)</i>	pounds	XW	Extreme High Water
LAM	Laminated	XLW	Extreme Low Water

1. DUCK AND GAWWAYSTAMP MANUFACTURERS SHALL PROVIDE ALL NECESSARY CALCULATIONS, SEALED DRAWINGS AND ALL OTHER SUPPORTING DOCUMENTATION REQUIRED BY THE GOVERNMENT JURISDICTIONS FOR PERMIT. ALL DRAWINGS AND CALCULATIONS SHALL BE ISSUED AND STAMPED BY A LICENSED CALIFORNIA PROFESSIONAL ENGINEER. DRAWINGS SHALL SHOW ALL DETAILS AND OVERALL CONFIGURATIONS NECESSARY TO CLEARLY DETERMINE THE WORK AND MATERIALS OF CONSTRUCTION.
2. GENERAL CONTRACTOR SHALL COORDINATE ALL WORK OF ALL SUBCONTRACTORS AND OTHER SUBCONTRACTORS CONTRACTED DIRECTLY WITH THE OWNER, AS WELL AS WORK FOR SCHEDULE AND WORK COORDINATION REQUIREMENTS. THE OWNER SHALL BEAR RESPONSIBILITY FOR FAILURE ON THE PART OF THE CONTRACTOR TO COORDINATE ACTIVITIES OF CONTRACTORS EMPLOYEES OR SUBCONTRACTORS.
3. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS BEFORE STARTING WORK. THE OWNER OR SUBCONTRACTOR SHALL BE NOTIFIED OF DISCREPANCIES PRIOR TO START OF THE WORK. THE OWNER SHALL BEAR NO RESPONSIBILITY FOR EXPENSES INCURRED AS A RESULT OF FAILING ON THE PART OF THE CONTRACTOR TO VERIFY DIMENSIONS AND/OR VERIFIABLE SITE CONDITIONS PRIOR TO BEGINNING WORK.
4. DIMENSIONS TAKE PRECEDENCE OVER SCALE.
5. CONTRACTOR SHALL MAINTAIN FIRE LINES AND ACCESS TO EXISTING FACILITIES AND EQUIPMENT.
6. ALL WORK AND MATERIAL SHALL CONFORM TO THE CURRENT EDITIONS OF THE CALIFORNIA BUILDING CODE, UNIFORM FIRE CODE, UNIFORM MECHANICAL CODE, NATIONAL ELECTRICAL CODE, UNIFORM PLUMBING CODE AND AMERICANS WITH DISABILITIES ACT (ADA), ALUMINUM ASSOCIATION'S SPECIFICATIONS FOR ALUMINUM STRUCTURES.
7. CONTRACTOR SHALL STRICTLY ENFORCE ALL APPLICABLE SAFETY LAWS (E. OSHA, CAL-OSHA) AND MAINTAIN SITE SAFETY.
8. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE RESPONSIBILITY OF THE CONSTRUCTION WORK TO ENSURE THAT IT IS BUILT IN CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS.
9. THE CONTRACTOR SHALL MARK AND KEEP CURRENT A SET OF RECORD DRAWINGS SHOWING EXACT DETERMINED LOCATIONS OF CONSTRUCTION CHANGES. TWO SETS SHALL BE SUBMITTED TO THE OWNER WITHIN 30 DAYS OF PROJECT COMPLETION FOR ALL WORK AND SHALL INCLUDE ALL MAINTENANCE AND OPERATIONS MANUALS AND CERTIFICATIONS OF PERFORMANCE TO THESE PLANS AND SPECIFICATIONS.
10. "REMOVE" SHALL MEAN TO DEMOLISH, TRANSPORT AND DISPOSE OF AT CONTRACTOR'S EXPENSE.
11. "REMOVE AND REINSTALL" SHALL MEAN TO REMOVE, PROTECT, STORE, CLEAN AND REINSTALL IN GOOD CONDITION.
12. "SAVE/REUSE" SHALL MEAN TO UNDEBRASS, SORT INTO LUMP COMPONENTS, PACKAGE OR PALLETIZE INTO TRANSPORTABLE UNITS AND TRANSPORT TO A SITE DESIGNATED BY THE OWNER.
13. ALL UNBRIT ATTACHED TO GAWWAYS FOR SUPPORT OF UTILITIES SHALL BE OF ALUMINUM WITH 5/16" STEEL BOLT, CONNECTORS AND BOLTS.
14. INSPECTION: INSPECTORS: CONTINUOUS INSPECTION SHALL BE MADE BY A DESIGNATED INSPECTION INSPECTOR (PER CALIFORNIA TITLE 1704). THE DESIGN BUILD CONTRACTOR SHALL PROVIDE A WRITTEN REPORT TO THE OWNER FOR THE FOLLOWING:
  - A. ALL CRACKS (SEE ALSO NOTE 8) BE BELOW

#### 1. CONSTRUCTION RESPONSIBILITIES AND DEBRIS REMOVAL

- (A) NO CONSTRUCTION MATERIALS, EQUIPMENT, DEBRIS OR WASTE SHALL BE PLACED ON STORED WHERE IT MAY BE SUBJECT TO FLOUATION OR DISPERSION IN THE WATERS OF THE MARINA.
- (B) ANY AND ALL DEBRIS RESULTING FROM CONSTRUCTION ACTIVITIES SHALL BE REMOVED FROM THE SITE WITHIN 10 DAYS OF COMPLETION OF CONSTRUCTION.
- (C) NO MACHINERY OR CONSTRUCTION MATERIALS NOT ESSENTIAL FOR PROJECT IMPROVEMENTS SHALL BE ALLOWED AT ANY TIME IN THE INTERNATIONAL ZONE.
- (D) IF TURBID CONDITIONS ARE GENERATED DURING CONSTRUCTION, A SILT CURTAIN SHALL BE UTILIZED TO CONTROL TURBIDITY.
- (E) FLOATING BOOMS SHALL BE USED TO CONTAIN DEBRIS DISCHARGED INTO COASTAL WATERS AND ANY DEBRIS DISCHARGED SHALL BE RECOVERED AS SOON AS POSSIBLE BUT NO LATER THAN THE END OF EACH DAY.
- (F) NON-HAZARDOUS DEBRIS DISCHARGED INTO COASTAL WATERS SHALL BE RECOVERED BY OWNERS AS SOON AS POSSIBLE AFTER LOSS.
- (G) REASONABLE AND PRUDENT MEASURES SHALL BE TAKEN TO PREVENT ALL DISCHARGE OF POLLUTING MATERIALS FROM ANY TYPE OF PULVERIZER OR CONSTRUCTION EQUIPMENT OR POWER TOOLS INTO THE WATERS. THE APPLICANT AND THE APPLICANT'S CONTRACTORS SHALL HAVE ADEQUATE EQUIPMENT AND PERSONNEL TO PREVENT SUCH DISCHARGES.

### Site Plan



### AREA OF WORK

**Project Address:**  
1400 Seaport Blvd.  
Redwood City, CA 94063

Bellingham

**MARINE**  
Innovative harbor  
and waterfront solutions  
Southwest Division  
1205 Business Park Drive  
Dixon, CA 95820  
TEL: (707) 678-2385  
FAX: (707) 678-1760

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**UNFLOAT**

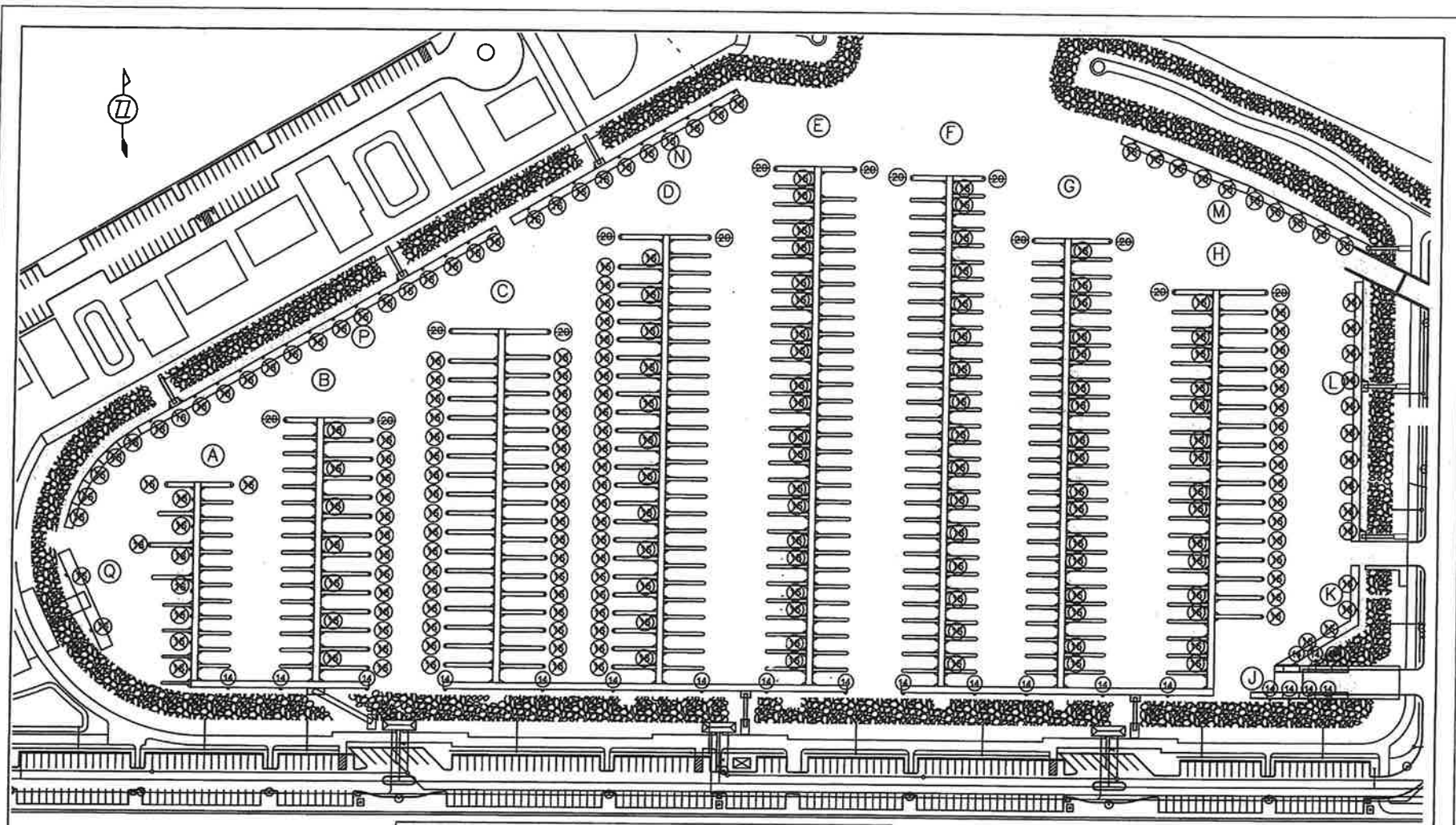
City of Redwood

### General Notes

REPORT NO.	115	115
REPORT NO.	115	115
DATE OF	2-13-68	2-13-68
DATE OF	2-13-68	2-13-68
DATE	2-13-68	2-13-68

CS2





(14) = 14" Prestressed Concrete Piles w/ 7- 1/2" LRS Fc = 6 ksi 21 each  
 (16) = 16" Prestressed Concrete Piles w/ 8- 1/2" LRS Fc = 6 ksi 242 each  
 (20) = 20" Prestressed Concrete Piles w/ 14- 1/2" LRS Fc = 6 ksi 14 each

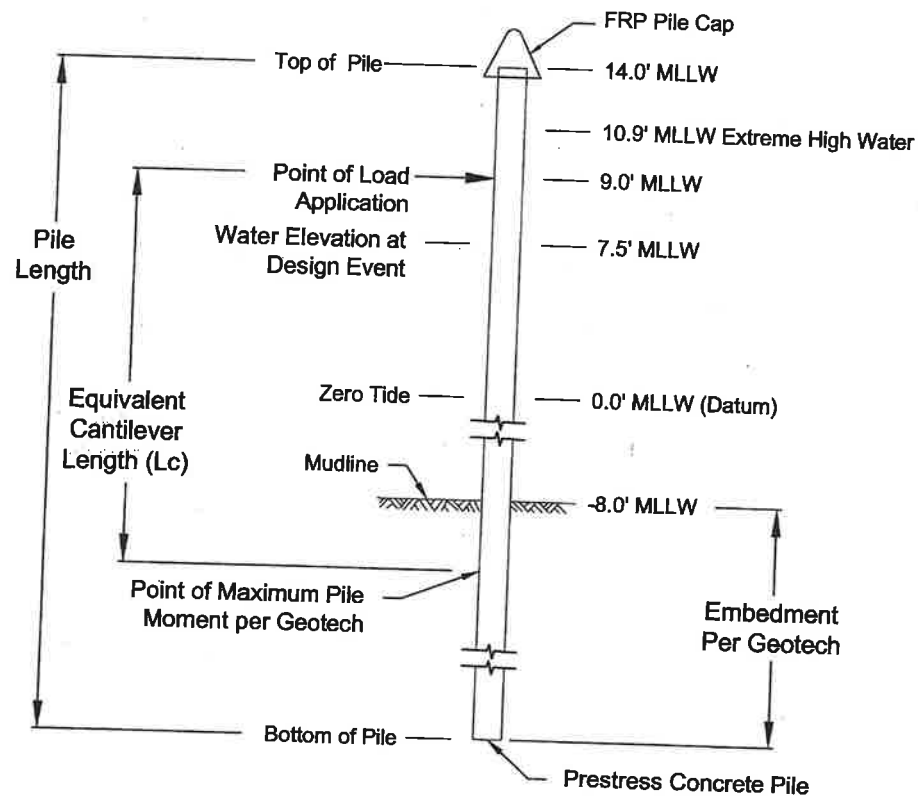
NO.	DATE	DESCRIPTION	BY

Project Number:  
**06-3-442**  
 PROJECT MANAGER

**Westpoint Marina**  
 Redwood City, Ca.  
**Pile Layout**

**Bellingham**  
**UNIFLOW**  
 Bellingham Marine Construction, Inc.  
 1000 1st Avenue, Suite 100  
 Bellingham, WA 98201  
 Phone: (360) 863-1111  
 Fax: (360) 863-1112  
 Email: info@bellinghammarine.com

SHEET No. 1 of 1  
 DRAWN BY: D. Hildreth  
 CHECKED BY:   
 DATE: 6/13/03  
 SCALE: AS SHOWN  
 CITY OF REDWOOD CITY  
 APPROVED BY:   
 DATE:   
 PL1

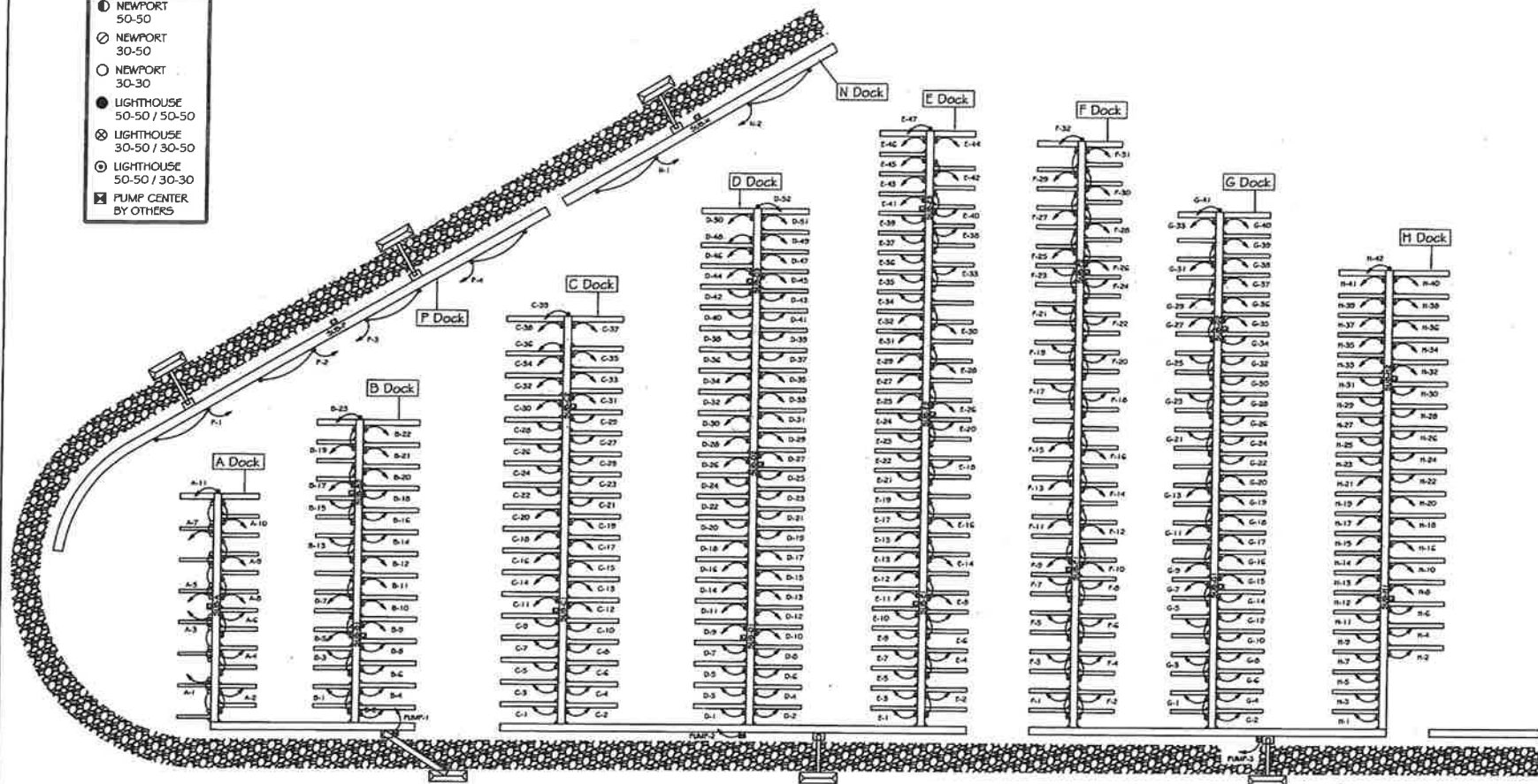


14"Ø Pa = 2.8k - 25' Embed  
 16"Ø Pa = 4.3k - 25' Embed  
 20"Ø Pa = 8.0k - 29' Embed

Project Number: <b>06-3-442</b>		<b>Westpoint Marina</b> Redwood City, Ca.		<b>Bellingham</b> CONSULTING ENGINEERS		City Of Redwood City	
Project Manager:		Pile Design Elevation		Drawing Number: PD1		Date:	
Revisions:		Scale:		Sheet: 6 of 43		Total:	



PEDESTAL LEGEND:	
●	NEWPORT 50-50
○	NEWPORT 30-50
○	NEWPORT 30-30
●	LIGHTHOUSE 50-50 / 50-50
⊗	LIGHTHOUSE 30-50 / 30-50
⊙	LIGHTHOUSE 50-50 / 30-30
⊠	PUMP CENTER BY OTHERS




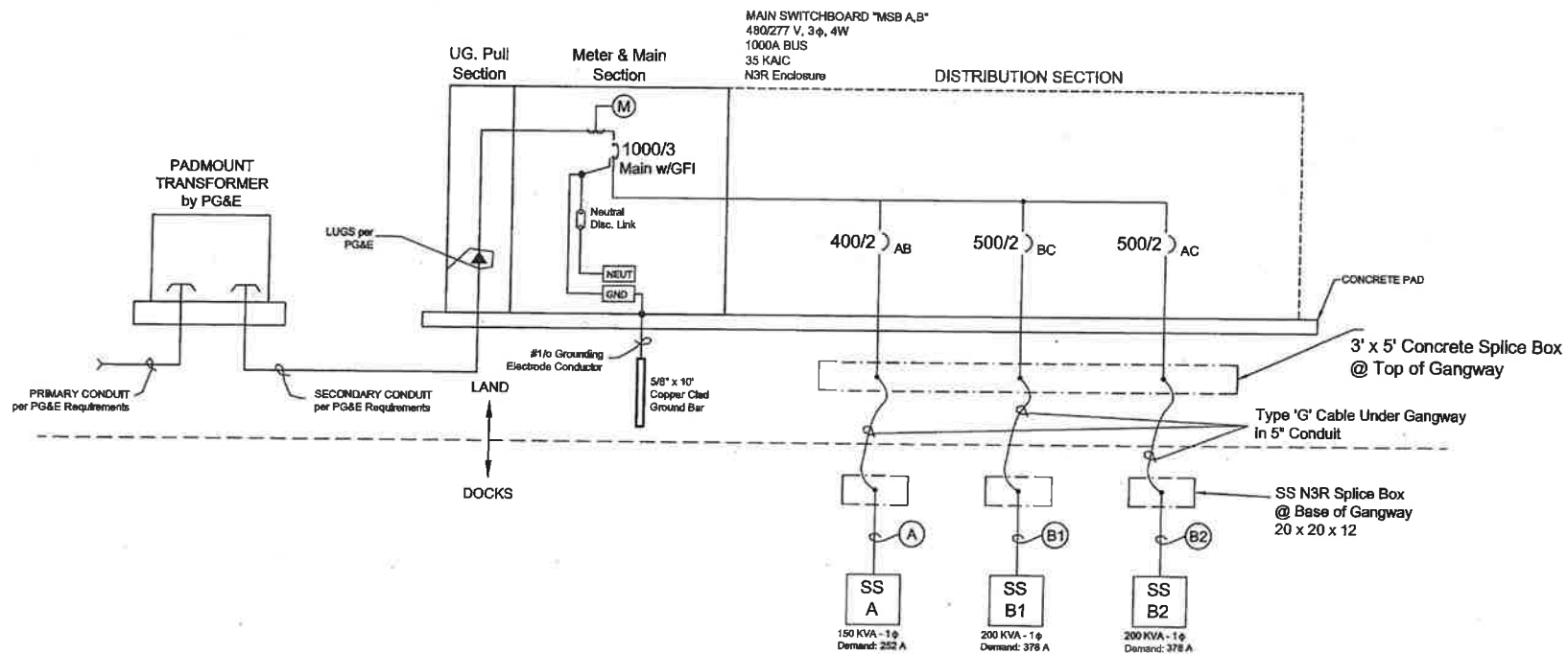
11-7-87 NO. DATE DESCRIPTION REVISIONS		Project Number: <b>06-3-442</b> Project Manager: Ron Mock	<b>Westpoint Marina</b> 1529 Seaport Blvd. Redwood City, Ca. Electrical Service Layouts- All Docks	<b>Bellingham</b> UNIFORM Electrical Design by: BELLINGHAM ELECTRIC, INC. 1355 Business Park Drive Clare, Ca 94522 707-479-5285 Ca. Contractor's License No: 44048 Contributions: A, C, B, C, B	SHEET: 1 of 24 DRAWN BY: E1 CHECKED BY: E1 CITY OF REDWOOD CITY
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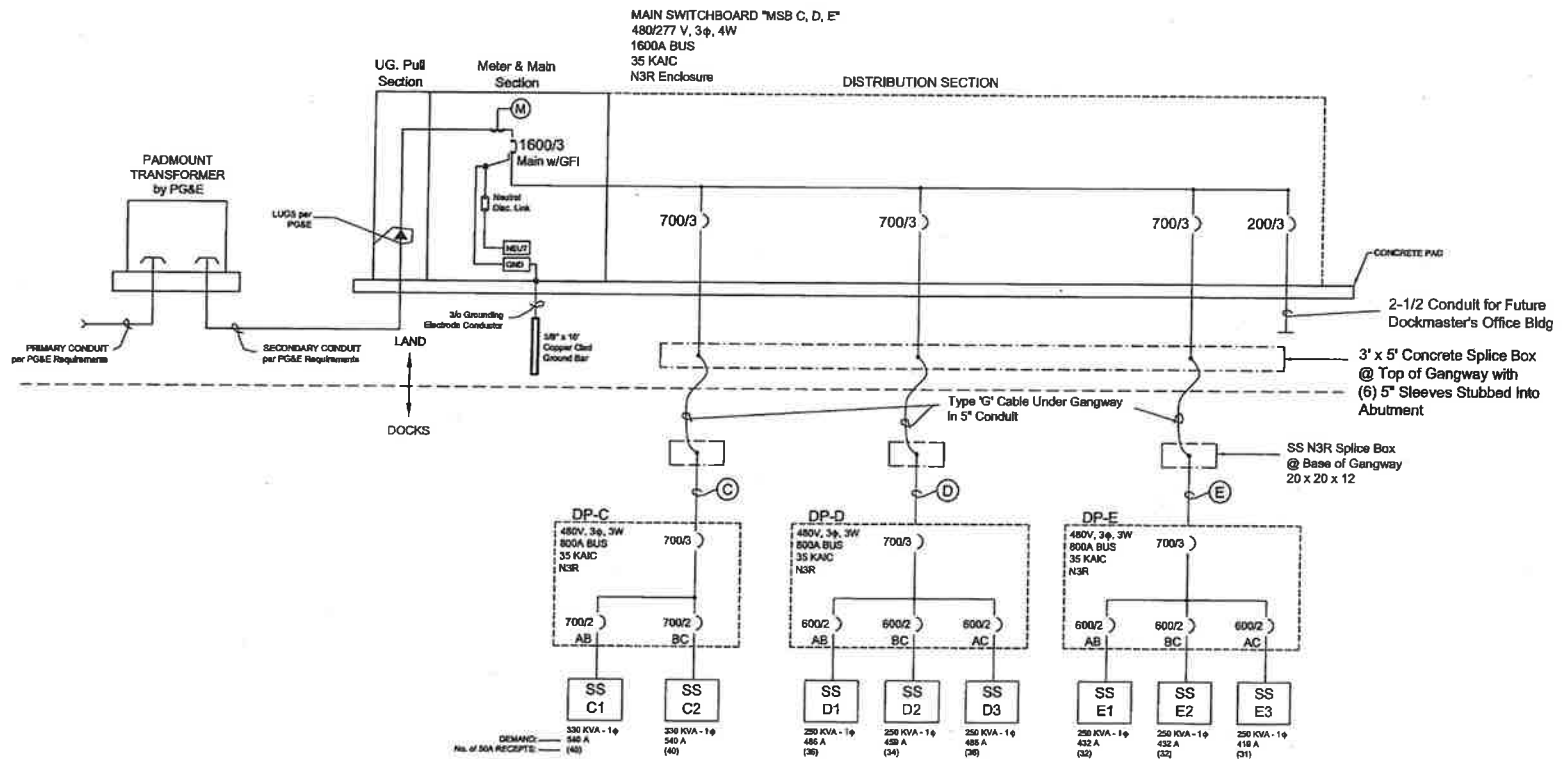
# LOAD SUMMARY & FEEDER SCHEDULE: DOCKS C, D, E, N, P

CIRCUIT/ PHASE	NO. 30A/120V RECEPTS- VA	NO. 50A/240V RECEPTS- VA	DEMAND FACTOR	DEMAND AMPS	WIRE SIZE	GROUND SIZE	CONDUIT	LENGTH	% (VD)
C / 3		80 x 12,000	30% x .9	540	(2) #500	2 / o	(2) 3"	700'	1.8
CA / 1		40 x 12,000	60% x .9	540	(2) #500	2 / o	(2) 3"	10'	—
CB / 1		40 x 12,000	60% x .9	540	(3) #350	2 / o	(1) 4"	215'	0.7
D / 3		106 x 12,000	30% x .9	413	(2) #350	2 / o	(2) 2-1/2"	400'	1.1
DA / 1		36 x 12,000	60% x .9	486	(2) #350	2 / o	(2) 2-1/2"	10'	—
DB / 1		34 x 12,000	60% x .9	459	(2) #350	2 / o	(2) 2-1/2"	180'	0.7
DC / 1		36 x 12,000	60% x .9	486	(2) #500	2 / o	(2) 3"	365'	1
E / 3		95 x 12,000	30% x .9	370	(2) #350	2 / o	(2) 2-1/2"	425'	1.1
EA / 1		32 x 12,000	60% x .9	432	(2) #350	2 / o	(2) 2-1/2"	10'	—
EB / 1		32 x 12,000	60% x .9	432	(2) #350	2 / o	(2) 2-1/2"	200'	0.7
EC / 1		31 x 12,000	60% x .9	419	(2) #500	2 / o	(2) 3"	415'	1
N / 1		8 x 12,000	90% x .9	162	(1) #350	2 / o	(1) 4"	1050'	2.7
P / 1		16 x 12,000	70% x .9	252	(1) #500	2 / o	(1) 4"	800'	2.3

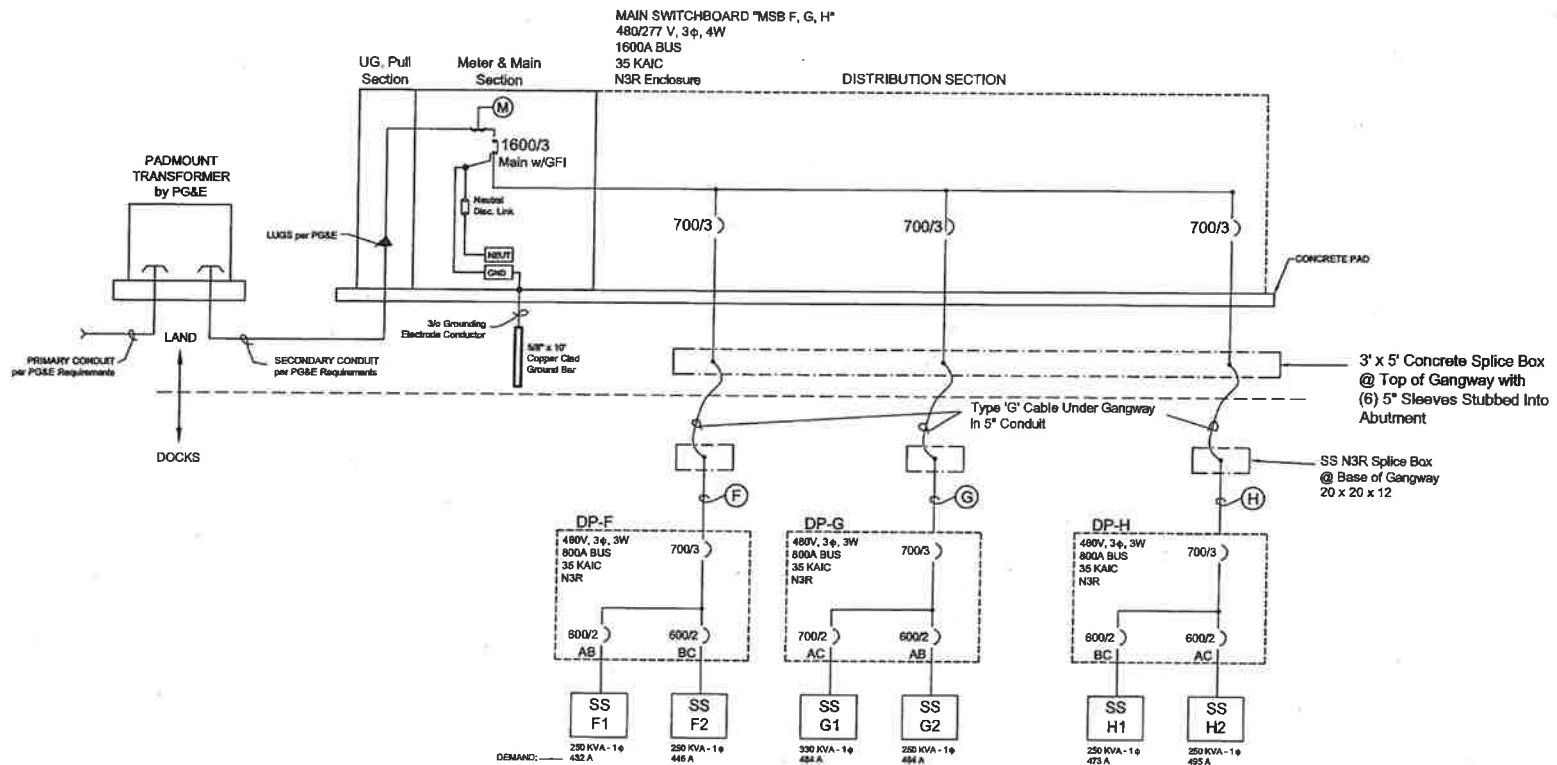
Project Number: <b>06-3-442</b>		<b>Westpoint Marina</b> 1529 Seaport Blvd. Redwood City, Ca.				Bellingham Marine Industries, Inc. 1285 Redwood Park Dr. Orland, CA 94655 707-474-2385 Fax: 707-474-2385 Email: bellingham@bellinghammarine.com		City Of Redwood City	
Project Manager: Ron Mock		Load Summary & Feeder Schedule: Docks C, D, E, N & P		The undersigned hereby certifies that the above information is true and correct to the best of my knowledge and belief, and that I am a duly licensed professional engineer in the State of California.		Drawing Number: E2		Date: 11-2-07	
Revisions:		Description:		Electrical Panel Schedule #1		Date: 11-2-07		Project: 06-3-442	



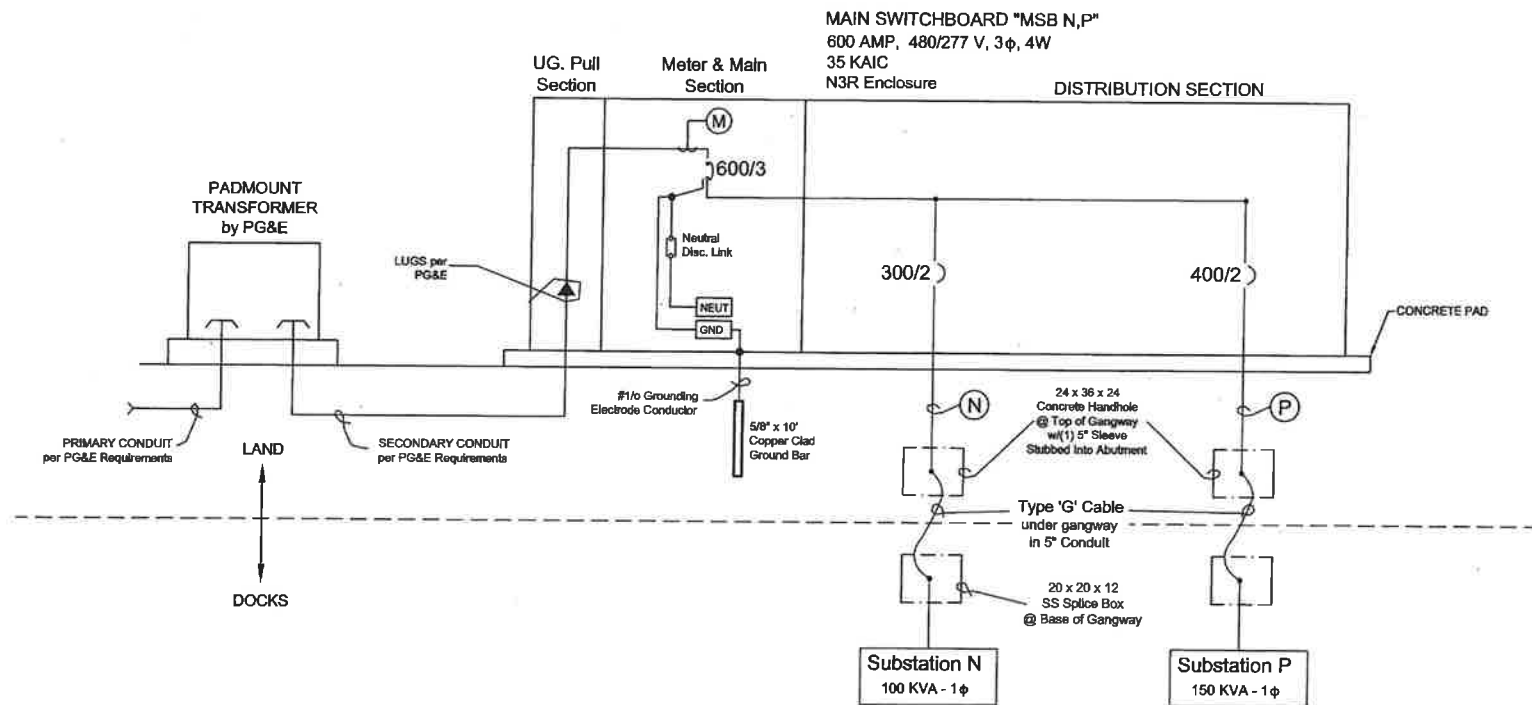
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<div> <div>11-7-87</div> <div>Electrical Permit Submittal #1</div> </div>	<div> <div>NO.</div> <div>DATE</div> <div>DESCRIPTION</div> </div>	<div> <div>BY</div> <div>PROJECT MANAGER</div> <div>Ron Mock</div> </div>	<div> <div>Project Number:</div> <div>06-3-442</div> <div>Westpoint Marina</div> <div>1529 Seaport Blvd. Redwood City, Ca.</div> <div>Landside Power- Main Switchboard Diagrams- N &amp; P Docks</div> </div>	<div> <div>Bellingham</div> <div>UNIFLOAT</div> </div>	<div> <div>Prepared by:</div> <div>Bellingham Marine Industries, Inc.</div> <div>1555 Business Park Dr</div> <div>San Jose, CA 95128</div> <div>708-431-0286</div> <div>Customer License # 45848</div> <div>Classifications: A, C14, C16</div> </div>	<div> <div>City Of Redwood City</div> <div> <div> <div>DATE</div> <div>BY</div> <div>DATE</div> <div>BY</div> </div> </div> </div>
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# SUBSTATION 'A'

N3R Enclosure

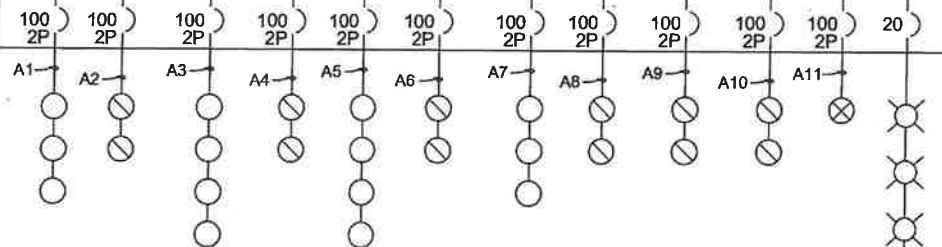
600 AMP BUS

3 / 0 CU

1/4" x 2" x 10"  
Solid Copper Bar  
In Water

150 KVA TRANSFORMER, 1  $\phi$   
Primary: 480 V  
Secondary: 120/240 V, 1  $\phi$ , 3 W.

600 / 2



LIGHTS

## Substation A

Circuit ID	Phase	Voltage	Reclosers					TOTAL	Total Current	Load Factor	Meter Factor	Conduit Size	Conduit Fill A1	Effective Current	Breaker Size	Breaker Rating	Wire Length	Wire Type	Resistance	# of Conduits	Wire Size	Ground Size	Voltage Drop %
			20A GEI	30A 120V	50A 120/240V	100A 120/240V	100A 120/240V																
A-1	1	120 // 240	0	0	0	0	0	0	90.0	90%	90%	1-1/4"	100%	72.9	100	2	134	THWN	0.25	3	#3	#6	2.04%
A-2	1	120 // 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	138	THWN	0.25	3	#3	#6	2.20%
A-3	1	120 // 240	0	0	0	0	0	0	120.0	90%	90%	1-1/4"	100%	87.2	100	2	71	THWN	0.25	3	#3	#6	1.44%
A-4	1	120 // 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	95	THWN	0.25	3	#3	#6	1.77%
A-5	1	120 // 240	0	0	0	0	0	0	120.0	90%	90%	1-1/4"	100%	87.2	100	2	71	THWN	0.25	3	#3	#6	2.04%
A-6	1	120 // 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	95	THWN	0.25	3	#3	#6	1.77%
A-7	1	120 // 240	0	0	0	0	0	0	90.0	90%	90%	1-1/4"	100%	72.9	100	2	57	THWN	0.25	3	#3	#6	1.02%
A-8	1	120 // 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	100	THWN	0.25	3	#3	#6	1.82%
A-9	1	120 // 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	143	THWN	0.25	3	#3	#6	2.68%
A-10	1	120 // 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	145	THWN	0.25	3	#3	#6	2.72%
A-11	1	120 // 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	145	THWN	0.25	3	#3	#6	2.72%
Light	1	120							0	1.6	100%	1/2"	100%	1.6	20	1							

Project Number:

06-3-442

**Westpoint Marina**  
1529 Seaport Blvd. Redwood City, Ca.

PROJECT MANAGER  
Ron Mock

Single Line & Feeder Schedule- Substation 'A'

**Bollinger**  
UNIFLOAT

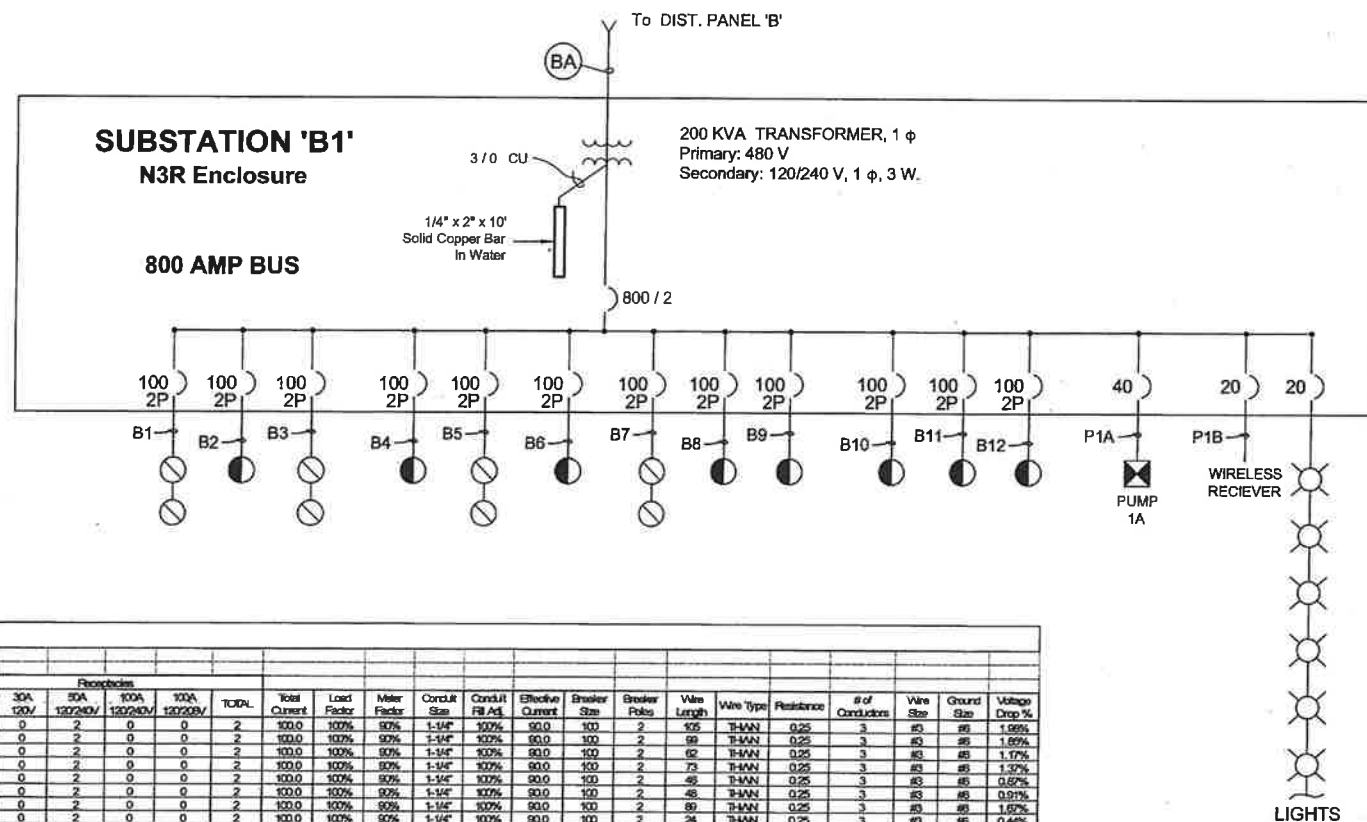
Electrical Design by:  
BOLLINGER & ASSOCIATES, INC.  
1300 Redwood Park Drive  
Redwood City, CA 94061  
708-295-2380  
CA Contractor's License No.  
J-0048  
Classification: A, C18, C19

Sheet: 1 of 1  
City of Redwood City  
Project: 06-3-442  
Sheet: 1 of 1  
City of Redwood City

City of Redwood City



Sheet: 1 of 1  
City of Redwood City

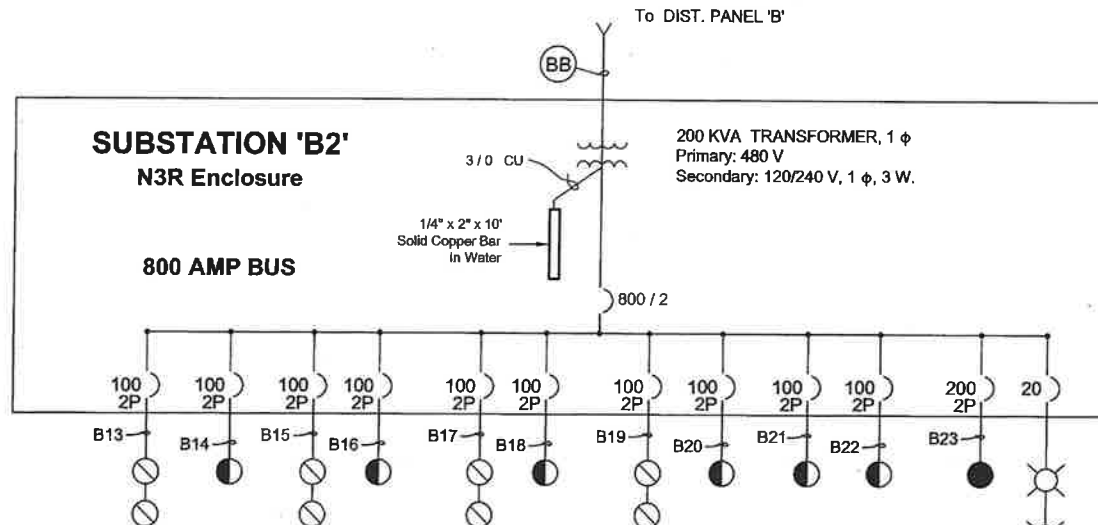




**Substation B1**

Circuit ID	Phase	Voltage	Receptacles					TOTAL	Total Current	Load Factor	Meter Factor	Conduit Size	Conduit Fill Adj.	Effective Current	Breaker Size	Breaker Poles	Wire Length	Wire Type	Resistance	# of Conductors	Wire Size	Ground Size	Voltage Drop %
			20A GFI	30A 120V	50A 120/240V	100A 120/240V	100A 120/208V																
B-1	1	120 // 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	125	THHN	0.25	3	#3	#6	1.98%
B-2	1	120 // 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	99	THHN	0.25	3	#3	#6	1.89%
B-3	1	120 // 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	62	THHN	0.25	3	#3	#6	1.17%
B-4	1	120 // 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	75	THHN	0.25	3	#3	#6	1.32%
B-5	1	120 // 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	49	THHN	0.25	3	#3	#6	0.92%
B-6	1	120 // 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	48	THHN	0.25	3	#3	#6	0.91%
B-7	1	120 // 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	80	THHN	0.25	3	#3	#6	1.62%
B-8	1	120 // 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	26	THHN	0.25	3	#3	#6	0.44%
B-9	1	120 // 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	20	THHN	0.25	3	#3	#6	0.32%
B-10	1	120 // 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	30	THHN	0.25	3	#3	#6	0.52%
B-11	1	120 // 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	77	THHN	0.25	3	#3	#6	1.45%
B-12	1	120 // 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	103	THHN	0.25	3	#3	#6	1.94%
Pump-1a	1	120						0	40.0	100%	100%	1"	100%	40.0	40	2	207	THHN	0.31	3	#4	#6	2.14%
Pump-1b	1	120						0	20.0	100%	100%	1"	100%	20.0	20	1	207	THHN	0.31	2	#4	#6	2.14%
Light	1	120						0	0.9	100%	100%	3/8"	100%	0.9	20	1							

11-7-87 NO. DATE DESCRIPTION REVISIONS	Project Number: <b>06-3-442</b> PROJECT MANAGER Ron Mock	<b>Westpoint Marina</b> 1529 Seaport Blvd. Redwood City, Ca.  Single Line & Feeder Schedule- Substation 'B1'	 	Electrical Design by: BELLINGHAM MARINE 1529 Seaport Blvd. Redwood City, CA 94063 415-739-2345 Co. Contractor's License No. 40498 Classification: A, C, D, E, F	Sheet: 06-3-442 Date: 11-7-87 Design: Ron Mock Check: Ron Mock Drawn: Ron Mock Title: Electrical Engineer	City Of Redwood City  11-7-87 11-7-87 11-7-87
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**Substation B2**

Circuit ID	Phase	Voltage	Receptacles					TOTAL	Total Current	Load Factor	Meter Factor	Conduit Size	Conduit Fill Adj.	Effective Current	Breaker Size	Breaker Poles	Wire Length	Wire Type	Resistance	# of Conductors	Wire Size	Ground Size	Voltage Drop %
			30A GFI	30A	50A	100A	100A																
B-13	1	120 // 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	87	THAN	0.25	3	#6	#6	1.63%
B-14	1	120 // 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	70	THAN	0.25	3	#6	#6	1.31%
B-15	1	120 // 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	44	THAN	0.25	3	#6	#6	0.83%
B-16	1	120 // 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	45	THAN	0.25	3	#6	#6	0.85%
B-17	1	120 // 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	46	THAN	0.25	3	#6	#6	0.87%
B-18	1	120 // 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	28	THAN	0.25	3	#6	#6	0.44%
B-19	1	120 // 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	59	THAN	0.25	3	#6	#6	1.07%
B-20	1	120 // 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	48	THAN	0.25	3	#6	#6	0.91%
B-21	1	120 // 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	73	THAN	0.25	3	#6	#6	1.37%
B-22	1	120 // 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	58	THAN	0.25	3	#6	#6	1.03%
B-23	1	120 // 240	0	0	4	0	0	4	200.0	100%	90%	2"	100%	180.0	200	2	100	THAN	0.077	3	#50	#4	1.19%
Light	1	120						0	1.0	100%	100%	1/2"	100%	1.0	20	1							
Lighting Circuit																							

Project Number: <b>06-3-442</b>		<b>Westpoint Marina</b> 1529 Seaport Blvd. Redwood City, Ca.		<b>Bollinger</b> <b>UNIFLOAT</b>		Electrical Design by: BOLLINGER ENGINEERING 1529 Seaport Blvd. Redwood City, CA 94063 (415) 338-1100		City Of Redwood City	
PROJECT MANAGER: Ron Mock		Single Line & Feeder Schedule- Substation 'B2'		Co. Contributor's License No. 45246 Classification: A, C1A, C1B		Sheet No. 24 Drawing No. E9		City Of Redwood City	

# **SUBSTATION 'C1'** N3R Enclosure

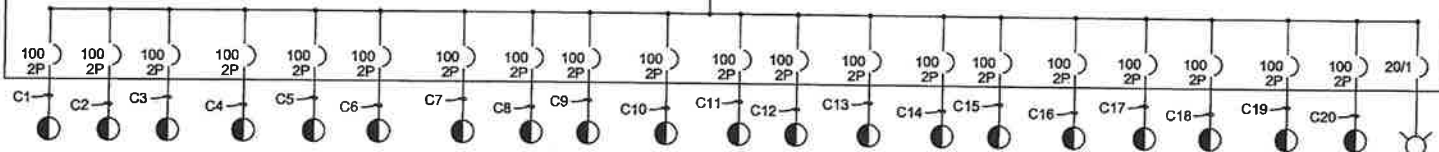
**1200 AMP BUS**

To DIST. PANEL 'C'

330 KVA TRANSFORMER, 1  $\phi$   
Primary: 480 V  
Secondary: 120/240 V, 1  $\phi$ , 3 W.

3/0 CU  
1/4" x 2" x 10'  
Solid Copper Bar  
In Water

1200 / 2

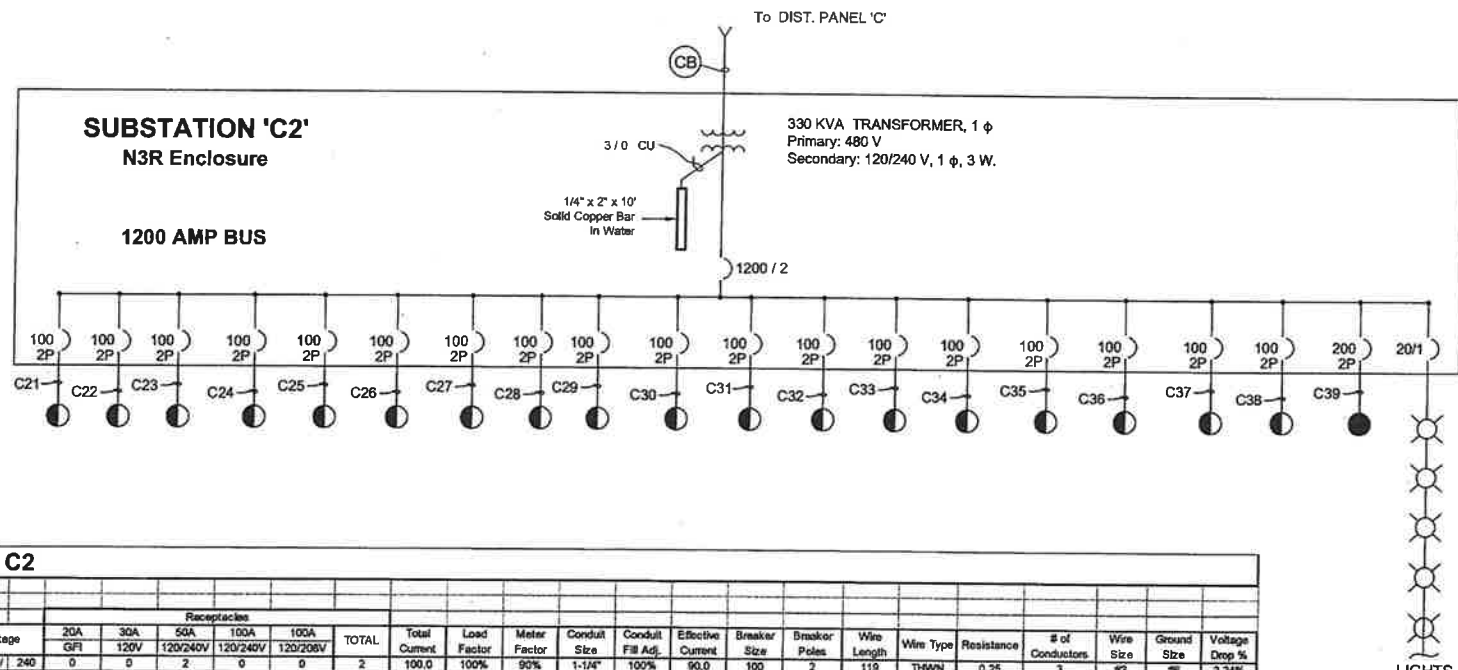


## **Substation C1**

Circuit ID	Phase	Voltage	Receptacles					TOTAL	Total Current	Load Factor	Meter Factor	Conduit Size	Conduit Fill Adj.	Effective Current	Breaker Size	Breaker Poles	Wire Length	Wire Type	Resistance	# of Conductors	Wire Size	Ground Size	Voltage Drop %
			20A GFI	30A 120V	50A 120/240V	100A 120/240V	100A 120/208V																
C-1	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	124	THWN	0.25	3	#3	#6	2.32%
C-2	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	133	THWN	0.25	3	#3	#6	2.50%
C-3	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	99	THWN	0.25	3	#3	#6	1.85%
C-4	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	110	THWN	0.25	3	#3	#6	2.06%
C-5	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	73	THWN	0.25	3	#3	#6	1.37%
C-6	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	85	THWN	0.25	3	#3	#6	1.59%
C-7	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	48	THWN	0.25	3	#3	#6	0.91%
C-8	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	61	THWN	0.25	3	#3	#6	1.15%
C-9	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	24	THWN	0.25	3	#3	#6	0.44%
C-10	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	38	THWN	0.25	3	#3	#6	0.71%
C-11	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	26	THWN	0.25	3	#3	#6	0.52%
C-12	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	30	THWN	0.25	3	#3	#6	0.56%
C-13	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	54	THWN	0.25	3	#3	#6	1.01%
C-14	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	53	THWN	0.25	3	#3	#6	0.99%
C-15	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	77	THWN	0.25	3	#3	#6	1.45%
C-16	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	77	THWN	0.25	3	#3	#6	1.45%
C-17	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	102	THWN	0.25	3	#3	#6	1.91%
C-18	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	103	THWN	0.25	3	#3	#6	1.94%
C-19	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	128	THWN	0.25	3	#3	#6	2.36%
C-20	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	128	THWN	0.25	3	#3	#6	2.40%
Light	1	120						0	1.2	100%	100%	TBD	100%	1.2	20	1							

LIGHTS

Project Number: <b>06-3-442</b>		<b>Westpoint Marina</b> 1529 Seaport Blvd. Redwood City, Ca.		<b>Bellingham</b> 1000 1st St. N.E. Everett, WA 98201		Electrical Design by: BELLINGHAM MARINE 1000 1st St. N.E. Everett, WA 98201		City Of Redwood City	
PROJECT MANAGER Ron Mock		Single Line & Feeder Schedule- Substation 'C1'		Ca. Commission License No. 44349		E10		City Of Redwood City	

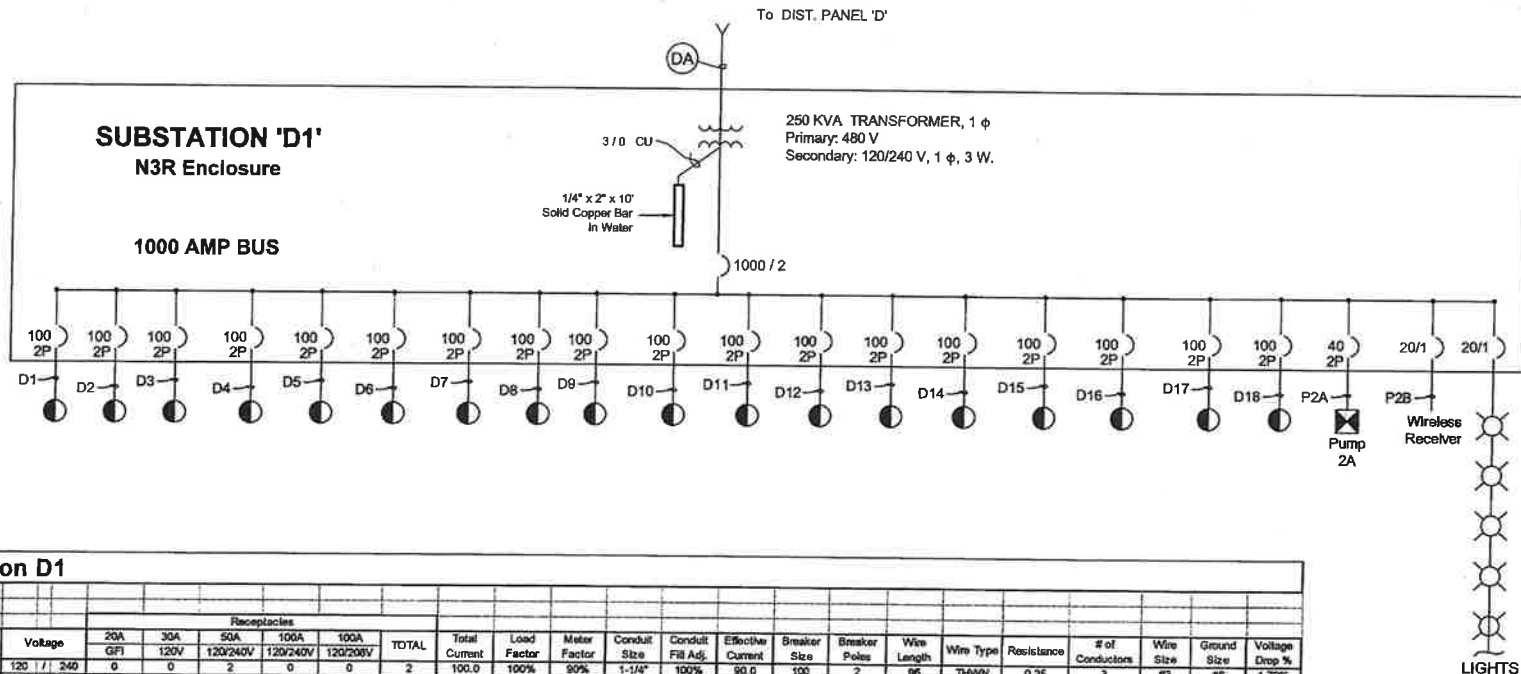


**Substation C2**

Circuit ID	Phase	Voltage	Receptacles					TOTAL	Total Current	Load Factor	Meter Factor	Conduit Size	Conduit Fill Adj.	Effective Current	Breaker Size	Breaker Poles	Wire Length	Wire Type	Resistance	# of Conductors	Wire Size	Ground Size	Voltage Drop %
			20A GFI	30A 120V	50A 120/240V	100A 120/240V	100A 120/208V																
C-21	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	119	THWN	0.25	3	#3	#6	2.24%
C-22	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	116	THWN	0.25	3	#3	#6	2.18%
C-23	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	96	THWN	0.25	3	#3	#6	1.79%
C-24	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	91	THWN	0.25	3	#3	#6	1.71%
C-25	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	71	THWN	0.25	3	#3	#6	1.33%
C-26	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	66	THWN	0.25	3	#3	#6	1.23%
C-27	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	47	THWN	0.25	3	#3	#6	0.89%
C-28	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	41	THWN	0.25	3	#3	#6	0.77%
C-29	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	24	THWN	0.25	3	#3	#6	0.44%
C-30	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	28	THWN	0.25	3	#3	#6	0.52%
C-31	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	27	THWN	0.25	3	#3	#6	0.50%
C-32	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	53	THWN	0.25	3	#3	#6	0.99%
C-33	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	51	THWN	0.25	3	#3	#6	0.95%
C-34	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	77	THWN	0.25	3	#3	#6	1.45%
C-35	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	74	THWN	0.25	3	#3	#6	1.39%
C-36	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	87	THWN	0.25	3	#3	#6	1.63%
C-37	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	108	THWN	0.25	3	#3	#6	2.02%
C-38	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	116	THWN	0.25	3	#3	#6	2.18%
C-39	1	120 / 240	0	0	4	0	0	4	200.0	100%	90%	2"	100%	180.0	200	2	110	THWN	0.077	3	#30	#4	1.37%
Light	1	120						0	1.2	100%	100%	TBD	100%	1.2	20	1							



LIGHTS

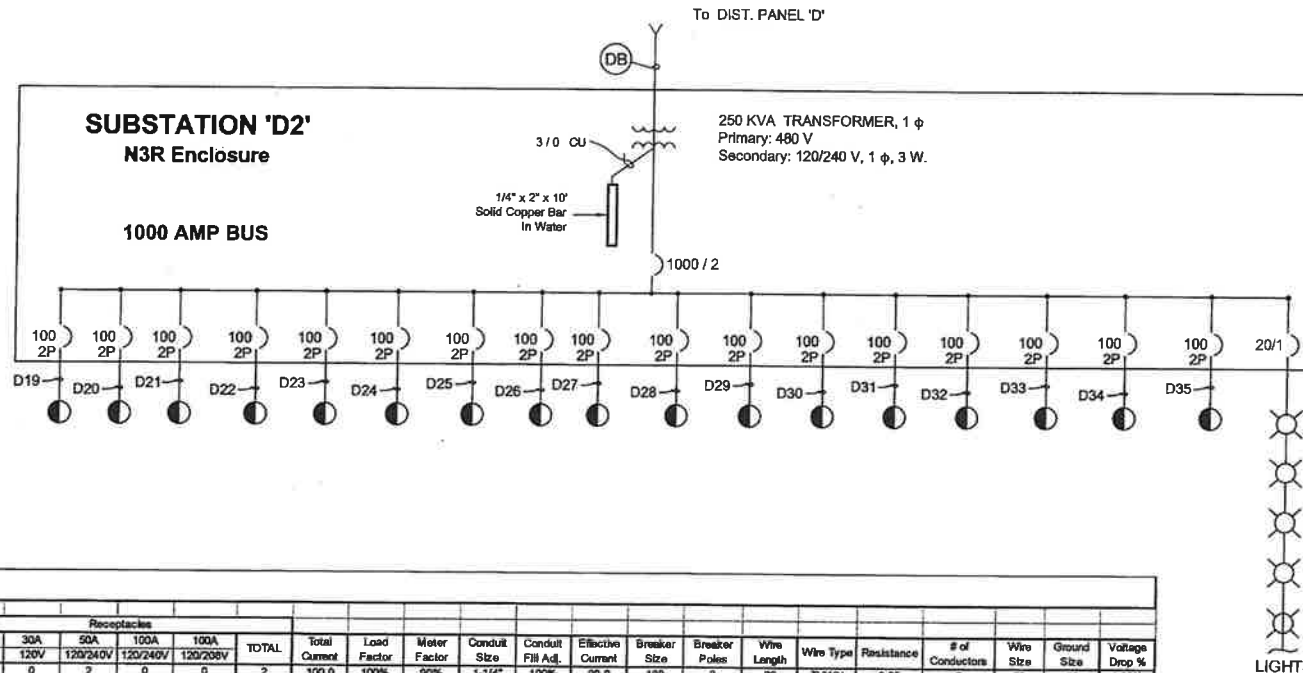
Project Number: <b>06-3-442</b>		<b>Westpoint Marina</b> 1529 Seaport Blvd. Redwood City, Ca.				Electrical Design by: BELLINGHAM MARINE INDUSTRIES, INC. 1288 Redwood Park Drive Redwood City, CA 94063 707-475-3262		City Of Redwood City	
PROJECT MANAGER: Ron Mock		Single Line & Feeder Schedule- Substation 'C2'				Co. Contractor's License No: 45449 Classification: A, C, H, C16		Drawing Number: <b>E11</b>	



**Substation D1**

Circuit ID	Phase	Voltage	Receptacles					TOTAL	Total Current	Load Factor	Meter Factor	Conduit Size	Conduit Fill Adj.	Effective Current	Breaker Size	Breaker Poles	Wire Length	Wire Type	Resistance	# of Conductors	Wire Size	Ground Size	Voltage Drop %
			20A GFI	30A 120V	50A 120/240V	100A 120/240V	100A 120/208V																
D-1	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	96	THWN	0.25	3	#3	#6	1.79%
D-2	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	104	THWN	0.25	3	#3	#6	1.96%
D-3	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	71	THWN	0.25	3	#3	#6	1.33%
D-4	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	82	THWN	0.25	3	#3	#6	1.53%
D-5	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	47	THWN	0.25	3	#3	#6	0.89%
D-6	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	59	THWN	0.25	3	#3	#6	1.11%
D-7	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	24	THWN	0.25	3	#3	#6	0.44%
D-8	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	37	THWN	0.25	3	#3	#6	0.69%
D-9	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	27	THWN	0.25	3	#3	#6	0.50%
D-10	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	30	THWN	0.25	3	#3	#6	0.56%
D-11	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	51	THWN	0.25	3	#3	#6	0.96%
D-12	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	53	THWN	0.25	3	#3	#6	0.99%
D-13	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	75	THWN	0.25	3	#3	#6	1.41%
D-14	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	74	THWN	0.25	3	#3	#6	1.39%
D-15	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	98	THWN	0.25	3	#3	#6	1.63%
D-16	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	99	THWN	0.25	3	#3	#6	1.65%
D-17	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	120	THWN	0.25	3	#3	#6	2.26%
D-18	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	123	THWN	0.25	3	#3	#6	2.30%
Pump-2a	1	120 / 240	Pump					0	40.0	100%	100%	1"	100%	40.0	40	2	118	THWN	0.49	3	#6	#8	1.93%
Pump-2b	1	120	Wireless Receiver					0	20.0	100%	100%	1"	100%	20.0	20	1	118	THWN	0.25	3	#6	#8	1.93%
Light	1	120	Lighting Circuit					0	0.9	100%	100%	TBD	100%	0.9	20	1				2	#6	#8	1.93%

11-247 Electrical Permit Submitted #1 NO. DATE DESCRIPTION REVISIONS	Project Number: <b>06-3-442</b> PROJECT MANAGER Ron Mock	<b>Westpoint Marina</b> 1529 Seaport Blvd. Redwood City, Ca.  Single Line & Feeder Schedule- Substation 'D1'	  <small>The design and construction of this project is subject to the approval of the local authority having jurisdiction. The design and construction of this project is subject to the approval of the local authority having jurisdiction. The design and construction of this project is subject to the approval of the local authority having jurisdiction.</small>	Electrical Design by: BELLINGHAM DESIGN, INC. 1001 Redwood Park Drive Redwood City, CA 94063 Tel: 650-336-3363 Fax: 650-336-3364 CA Contractor's License No.: 44349 Classification: A, C10, C16	City Of Redwood City  12 of 24 E12
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**Substation D2**




Circuit ID	Phase	Voltage	Receptacles					TOTAL	Total Current	Load Factor	Motor Factor	Conduit Size	Conduit Fill Adj.	Effective Current	Breaker Size	Breaker Poles	Wire Length	Wire Type	Resistance	# of Conductors	Wire Size	Ground Size	Voltage Drop %
			20A GFI	30A 120V	50A 120/240V	100A 120/240V	100A 120/208V																
D-19	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	90	THWN	0.25	3	#3	#6	1.09%
D-20	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	87	THWN	0.25	3	#3	#6	1.63%
D-21	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	68	THWN	0.25	3	#3	#6	1.27%
D-22	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	63	THWN	0.25	3	#3	#6	1.19%
D-23	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	45	THWN	0.25	3	#3	#6	0.85%
D-24	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	40	THWN	0.25	3	#3	#6	0.75%
D-25	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	23	THWN	0.25	3	#3	#6	0.42%
D-26	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	28	THWN	0.25	3	#3	#6	0.52%
D-27	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	26	THWN	0.25	3	#3	#6	0.48%
D-28	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	53	THWN	0.25	3	#3	#6	0.99%
D-29	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	48	THWN	0.25	3	#3	#6	0.91%
D-30	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	76	THWN	0.25	3	#3	#6	1.43%
D-31	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	71	THWN	0.25	3	#3	#6	1.33%
D-32	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	100	THWN	0.25	3	#3	#6	1.87%
D-33	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	94	THWN	0.25	3	#3	#6	1.75%
D-34	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	124	THWN	0.25	3	#3	#6	2.32%
D-35	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	116	THWN	0.25	3	#3	#6	2.16%
Light	1	120	Lighting Circuit					0	1.0	100%	100%	TBD	100%	1.0	20	1				3	#3	#6	2.16%

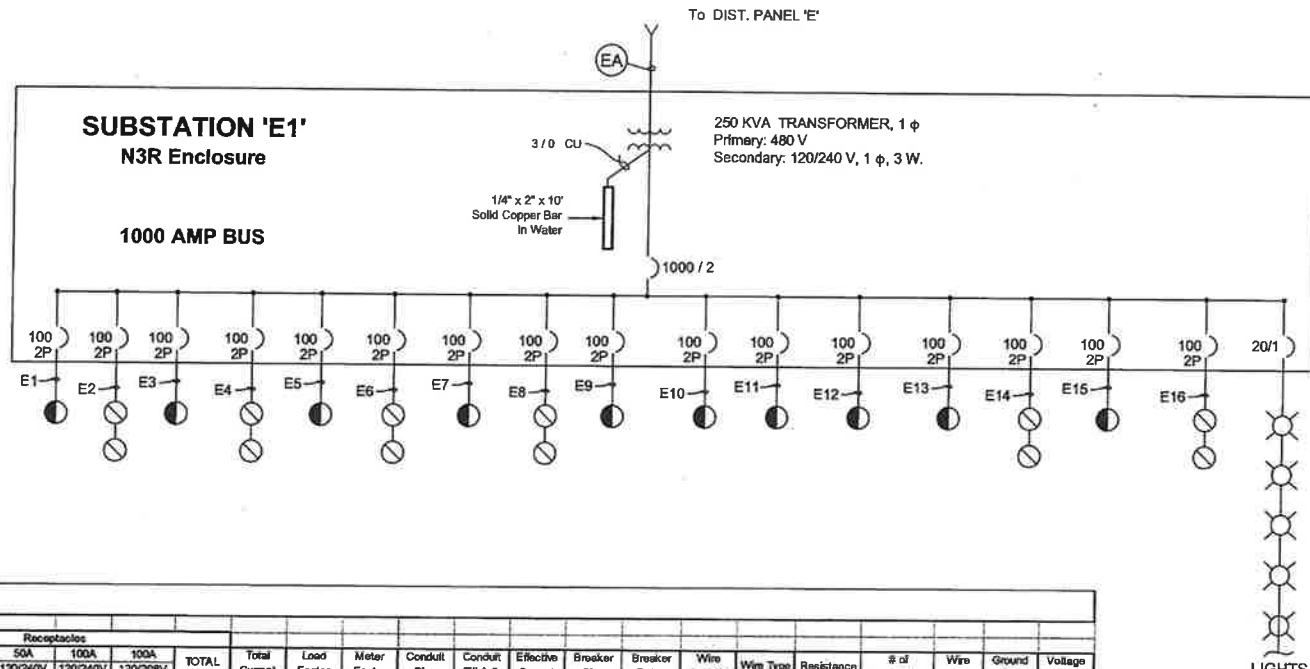
NO. DATE 11-7-97 Electrical Permit Submittal #1	Project Number: <b>06-3-442</b>	<b>Westpoint Marina</b> 1529 Seaport Blvd. Redwood City, Ca.	<b>Bellingham</b> ELECTRICAL 1200 Redwood Park Oaks Davis, CA 95618 707-426-0283	<b>USE-FLUOR</b> Fluor Corporation 10000 Westpark Drive Houston, TX 77036	Designated Design: BELLINGHAM ELECTRIC 1200 Redwood Park Oaks Davis, CA 95618 707-426-0283 CA Contractor's License No. #42429 Classification: A, C16, C18	SHEET NO. 13 of 24 CITY OF REDWOOD CITY E13
PROJECT MANAGER Ron Mock		Single Line & Feeder Schedule- Substation 'D2'				





Circuit ID	Phase	Voltage	Receptacles						TOTAL	Total Current	Load Factor	Meter Factor	Conduit Size	Conduit Fill Adj.	Effective Current	Breaker Size	Breaker Poles	Wire Length	Wire Type	Resistance	# of Conductors	Wire Size	Ground Size	Voltage Drop
			20A GFI	30A 120V	50A 120/240V	100A 120/240V	100A 120/208V																	
D-36	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	96	THWN	0.25	3	#3	#6	1.79%	
D-37	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	104	THWN	0.25	3	#3	#6	1.90%	
D-38	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	71	THWN	0.25	3	#3	#6	1.33%	
D-39	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	82	THWN	0.25	3	#3	#6	1.53%	
D-40	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	47	THWN	0.25	3	#3	#6	0.89%	
D-41	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	59	THWN	0.25	3	#3	#6	1.11%	
D-42	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	24	THWN	0.25	3	#3	#6	0.44%	
D-43	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	27	THWN	0.25	3	#3	#6	0.69%	
D-44	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	37	THWN	0.25	3	#3	#6	0.50%	
D-45	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	30	THWN	0.25	3	#3	#6	0.56%	
D-46	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	53	THWN	0.25	3	#3	#6	0.82%	
D-47	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	60	THWN	0.25	3	#3	#6	1.13%	
D-48	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	75	THWN	0.25	3	#3	#6	1.41%	
D-49	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	69	THWN	0.25	3	#3	#6	1.67%	
D-50	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	86	THWN	0.25	3	#3	#6	1.83%	
D-51	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	100	THWN	0.25	3	#3	#6	1.15%	
D-52	1	120 / 240	0	0	4	0	0	4	200.0	100%	90%	2"	100%	180.0	200	2	100	THWN	0.077	3	#3/0	#4	1.15%	
Light	1	120	Lighting Circuit						0	1.1	100%	100%	1BD	100%	1.1	20	1							

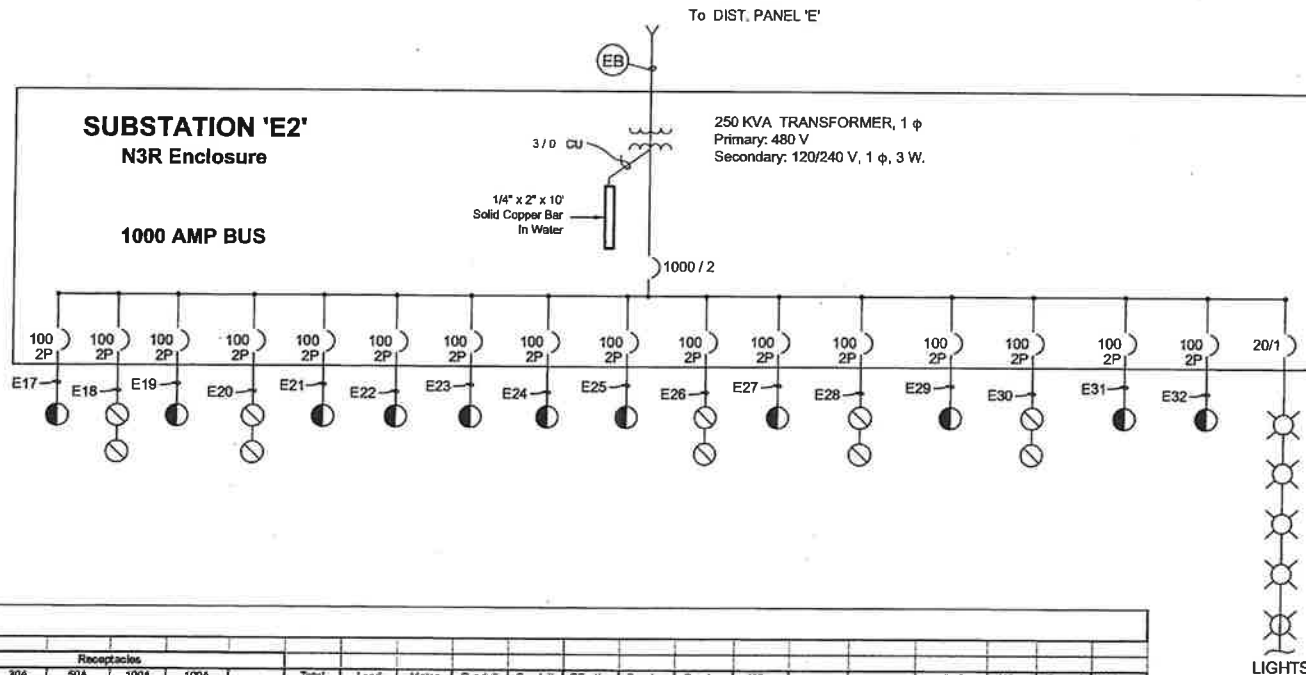
	Project Number: <b>06-3-442</b>		<b>Westpoint Marina</b> 1529 Seaport Blvd. Redwood City, Ca.		 		Electrical Design by: <b>BELLINGHAM MARINE ELECTRICITY, INC.</b> 1287 Buckleup Park Drive Elmer, CA 95029 707-479-2248		City of Redwood City	
	11-27-07 Electrical Permit Submittal #1	D. D.	PROJECT MANAGER Ron Mock	<b>Single Line &amp; Feeder Schedule- Substation 'D3'</b>		This equipment schedule contains information which is the property of Bellingham Marine Electricity, Inc. and is loaned to you for your use only. It is not to be retransmitted or used in any way without the written consent of Bellingham Marine Electricity, Inc. If you wish to reproduce or use this information in any way, you must obtain the written consent of Bellingham Marine Electricity, Inc.		Ca. Contractor's License No. 443486 Classification: A - CEN, C19		City of Redwood City



**Substation E1**

Circuit ID	Phase	Voltage	Receptacles					TOTAL	Total Current	Load Factor	Meter Factor	Conduit Size	Conduit Fill Adj.	Effective Current	Breaker Size	Breaker Poles	Wire Length	Wire Type	Resistance	# of Conductors	Wire Size	Ground Size	Voltage Drop
			20A GFI	30A 120V	50A 120/240V	100A 120/240V	100A 120/208V																
E-1	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	135	THWN	0.25	3	#3	#6	2.54%
E-2	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	145	THWN	0.25	3	#3	#6	2.72%
E-3	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	113	THWN	0.25	3	#3	#6	2.12%
E-4	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	101	THWN	0.25	3	#3	#6	1.89%
E-5	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	90	THWN	0.25	3	#3	#6	1.69%
E-6	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	57	THWN	0.25	3	#3	#6	1.07%
E-7	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	88	THWN	0.25	3	#3	#6	0.99%
E-8	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	63	THWN	0.25	3	#3	#6	0.85%
E-9	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	45	THWN	0.25	3	#3	#6	0.65%
E-10	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	23	THWN	0.25	3	#3	#6	0.42%
E-11	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	26	THWN	0.25	3	#3	#6	0.48%
E-12	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	48	THWN	0.25	3	#3	#6	0.91%
E-13	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	71	THWN	0.25	3	#3	#6	1.33%
E-14	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	97	THWN	0.25	3	#3	#6	1.61%
E-15	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	94	THWN	0.25	3	#3	#6	1.75%
E-16	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2							
Light	1	120	Lighting Circuit					0	1.3	100%	100%	TBD	100%	1.3	20	1	141	THWN	0.25	3	#3	#6	2.64%

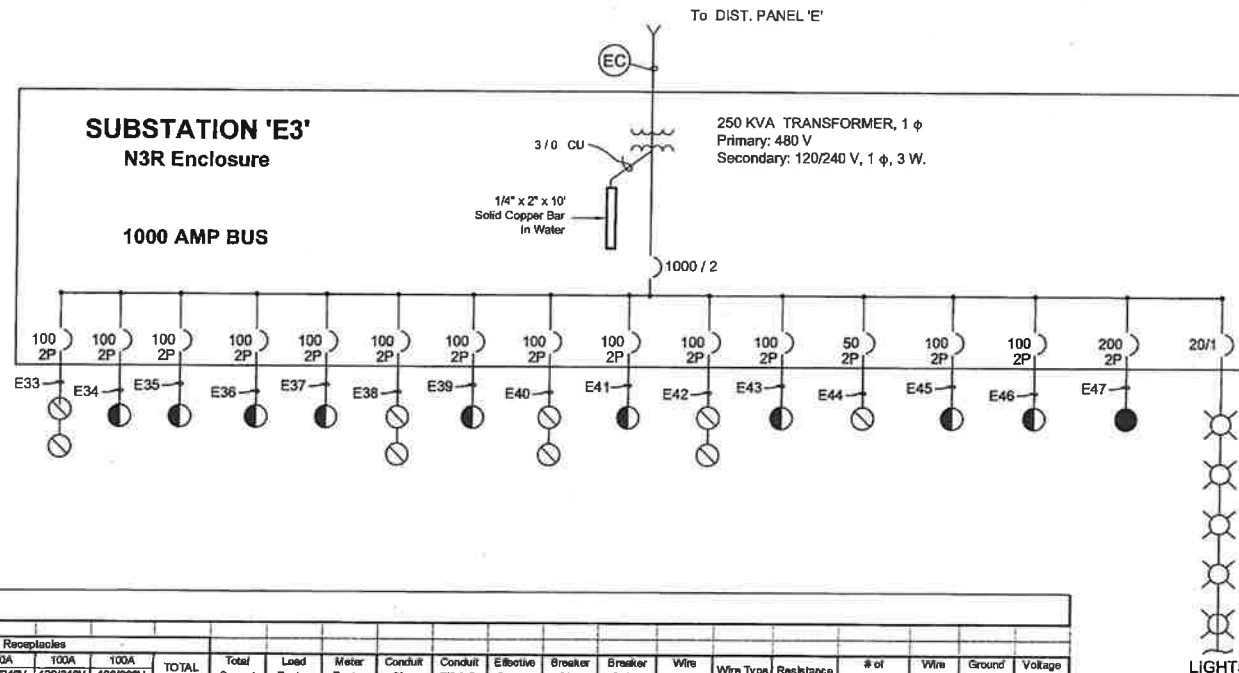
11-247 NO. DATE DESCRIPTION REVISIONS	Project Number: <b>06-3-442</b> PROJECT MANAGER Ron Mock	<b>Westpoint Marina</b> 1529 Seaport Blvd. Redwood City, Ca.  Single Line & Feeder Schedule- Substation 'E1'	<b>Bellingham</b> <b>UNIFLUX</b> <small>The Bellingham Group is a leader in the design and construction of electrical systems for commercial and industrial facilities. Our experienced staff provides a full range of services from initial design to final construction. We are proud to be a part of the Bellingham Group, a leader in the industry.</small>	Electrical Design by BELLINGHAM MARINE INDUSTRIAL, INC. 1235 Redwood Park Drive Redwood City, CA 94061 707-475-0001 CA Contractor's License No. 44046 Classification: A, CK, CM	SHEET No. 1 of 1 DRAWN BY: E. G. Gies CHECKED BY: B. Gies Bellingham Marine Industrial (Site Address) SHEET 15 of 24 Drawing Number: <b>E15</b>	City Of Redwood City APPROVED BY: _____ APPROVED BY: _____
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**Substation E2**

Circuit ID	Phase	Voltage	Receptacles					TOTAL	Total Current	Load Factor	Meter Factor	Conduit Size	Conduit Fill Adj.	Effective Current	Breaker Size	Breaker Poles	Wire Length	Wire Type	Resistance	# of Conductors	Wire Size	Ground Size	Voltage Drop %
			20A GFI	30A 120V	50A 120/240V	100A 120/240V	100A 120/208V																
E-17	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	135	THWN	0.25	3	#3	#6	2.54%
E-18	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	89	THWN	0.25	3	#3	#6	1.67%
E-19	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	113	THWN	0.25	3	#3	#6	2.12%
E-20	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	45	THWN	0.25	3	#3	#6	0.85%
E-21	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	80	THWN	0.25	3	#3	#6	1.69%
E-22	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	68	THWN	0.25	3	#3	#6	1.27%
E-23	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	45	THWN	0.25	3	#3	#6	0.85%
E-24	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	23	THWN	0.25	3	#3	#6	0.42%
E-25	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	44	THWN	0.25	3	#3	#6	0.83%
E-26	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	47	THWN	0.25	3	#3	#6	1.25%
E-27	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	67	THWN	0.25	3	#3	#6	1.71%
E-28	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	91	THWN	0.25	3	#3	#6	2.54%
E-29	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	89	THWN	0.25	3	#3	#6	1.67%
E-30	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	135	THWN	0.25	3	#3	#6	2.54%
E-31	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	112	THWN	0.25	3	#3	#6	2.10%
E-32	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	134	THWN	0.25	3	#3	#6	2.52%
Light	1	120	Lighting Circuit					0	1.3	100%	100%	TBD	100%	1.3	20	1							

Project Number: <b>06-3-442</b>		<b>Westpoint Marina</b> 1529 Seaport Blvd. Redwood City, Ca.		<b>Bellingham</b> <small>Electricians, Inc.</small>		<b>UNIFLOUT</b> <small>Electricians, Inc.</small>		Electrical Design by: <b>BELLINGHAM MARINE</b> 1529 Seaport Blvd. Redwood City, CA 94063 708-895-0288		City Of Redwood City	
PROJECT MANAGER: Ron Mock		Single Line & Feeder Schedule- Substation 'E2'		Ca. Contractor's License No. A23418 Classification: A, C16, C18		SHEET NO. <b>E16</b> of <b>24</b> DRAWING NO. <b>06-3-442</b>		DATE: <b>11-7-07</b> DESCRIPTION: <b>Electrical Permit Submittal #1</b>		REVISIONS	































**Substation E3**

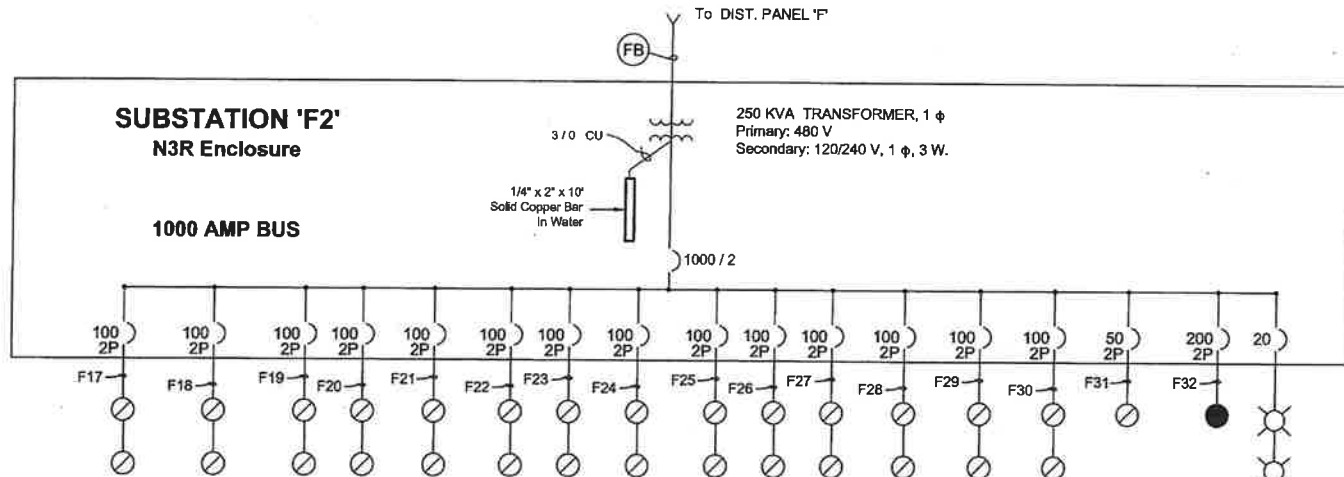
Circuit ID	Phase	Voltage	Receptacles						Total Current	Load Factor	Meter Factor	Conduit Size	Conduit Fill Adj.	Effective Current	Breaker Size	Breaker Poles	Wire Length	Wire Type	Resistance	# of Conductors	Wire Size	Ground Size	Voltage Drop	
			20A GFI	30A 120V	50A 120/240V	100A 120/240V	100A 120/208V	TOTAL																
E-33	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	112	THWN	0.25	3	#3	#6	2.10	
E-34	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	113	THWN	0.25	3	#3	#6	2.12	
E-35	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	90	THWN	0.25	3	#3	#6	1.69	
E-36	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	68	THWN	0.25	3	#3	#6	1.27	
E-37	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	45	THWN	0.25	3	#3	#6	0.85	
E-38	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	68	THWN	0.25	3	#3	#6	1.27	
E-39	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	23	THWN	0.25	3	#3	#6	0.42	
E-40	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	47	THWN	0.25	3	#3	#6	0.89	
E-41	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	26	THWN	0.25	3	#3	#6	0.48	
E-42	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	73	THWN	0.25	3	#3	#6	1.37	
E-43	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	48	THWN	0.25	3	#3	#6	0.91	
E-44	1	120 / 240	0	0	1	0	0	1	50.0	100%	90%	3/4"	100%	45.0	50	2	102	THWN	0.78	3	#6	#10	2.99	
E-45	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	71	THWN	0.25	3	#3	#6	1.33	
E-46	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	94	THWN	0.25	3	#3	#6	1.75	
E-47	1	120 / 240	0	0	4	0	0	4	200.0	100%	90%	2"	100%	160.0	200	2	104	THWN	0.077	3	#3/0	#4	1.20	
Light	1	120	Lighting Circuit						0	1.2	100%	100%	TBD	100%	1.2	20	1							

11-7-87 NO. DATE DESCRIPTION REVISIONS	Project Number: <b>06-3-442</b> PROJECT MANAGER Ron Mock	<b>Westpoint Marina</b> 1529 Seaport Blvd. Redwood City, Ca. Single Line & Feeder Schedule- Substation 'E3'	<b>Bellingham</b> <b>UNIFLOAT</b> <small>Electric and Electronic Services</small>	Electrical Design by: BELLINGHAM UNIFLOAT 1505 Business Park Drive San Jose, CA 95128 707-479-0365 Co. Contractor's License No. 42348 Classification: A - CIV. CH	Sheet: 17 of 34 Drawing Number: <b>E17</b>	City Of Redwood City
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Circuit ID	Phase	Voltage	Receptacles						Total Current	Load Factor	Meter Factor	Conduit Size	Conduit Fill Adj.	Effective Current	Breaker Size	Breaker Poles	Wire Length	Wire Type	Resistance	# of Conductors	Wire Size	Ground Size	Voltage Drop %
			20A GFI	30A 120V	50A 120/240V	100A 120/240V	100A 120/208V	TOTAL															
F-1	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	177	THHN	0.19	3	#2	#6	2.53%
F-2	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	188	THHN	0.19	3	#2	#6	2.69%
F-3	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	133	THHN	0.25	3	#3	#6	2.50%
F-4	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	143	THHN	0.25	3	#3	#6	2.69%
F-5	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	89	THHN	0.25	3	#3	#6	1.67%
F-6	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	100	THHN	0.25	3	#3	#6	1.67%
F-7	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	45	THHN	0.25	3	#3	#6	0.85%
F-8	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	57	THHN	0.25	3	#3	#6	1.07%
F-9	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	47	THHN	0.25	3	#3	#6	0.89%
F-10	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	51	THHN	0.25	3	#3	#6	0.95%
F-11	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	91	THHN	0.25	3	#3	#6	1.71%
F-12	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	94	THHN	0.25	3	#3	#6	1.75%
F-13	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	135	THHN	0.25	3	#3	#6	2.54%
F-14	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	137	THHN	0.25	3	#3	#6	2.56%
F-15	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	180	THHN	0.19	3	#2	#6	2.56%
F-16	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	180	THHN	0.19	3	#2	#6	2.56%
Pump-3a	1	120 / 240	0	0	0	0	0	0	40.0	100%	100%	1-1/4"	100%	40.0	40	2	420	THHN	0.19	3	#2	#6	2.68%
Pump-3b	1	120	0	0	0	0	0	0	20.0	100%	100%	1-1/4"	100%	20.0	20	1	420	THHN	0.19	2	#2	#6	2.68%
Light	1	120	0	0	0	0	0	0	1.9	100%	100%	TBD	100%	1.9	20	1							

                         		Project Number: <b>06-3-442</b>		<b>Westpoint Marina</b> 1529 Seaport Blvd. Redwood City, Ca.		 		Electrical Design by: BELLINGHAM SERVICE INDUSTRIES, INC. 1308 Broadway Park Drive Chino, CA 91705 714-479-2385		ISSUED FOR REVIEW DATE: 06-03-04 BY: S. Doherty CHECKED BY: S. Doherty CITY OF REDWOOD CITY	
11-7-87 DATE		Electrical Permit Submittal #1 DESCRIPTION		O.D.		PROJECT MANAGER Ron Mock		Single Line & Feeder Schedule- Substation 'F1' <small>           This document is the property of Bellingham Service Industries, Inc. and is loaned to the City of Redwood City for the purpose of reviewing and approving the design for the project. It is not to be used for any other purpose without the written consent of Bellingham Service Industries, Inc. All rights are reserved.         </small>		DESIGNED BY: Bellingham Service Industries DATE: 10 of 24 DRAWN BY: S. Doherty CHECKED BY: S. Doherty CITY OF REDWOOD CITY	
REVISIONS											



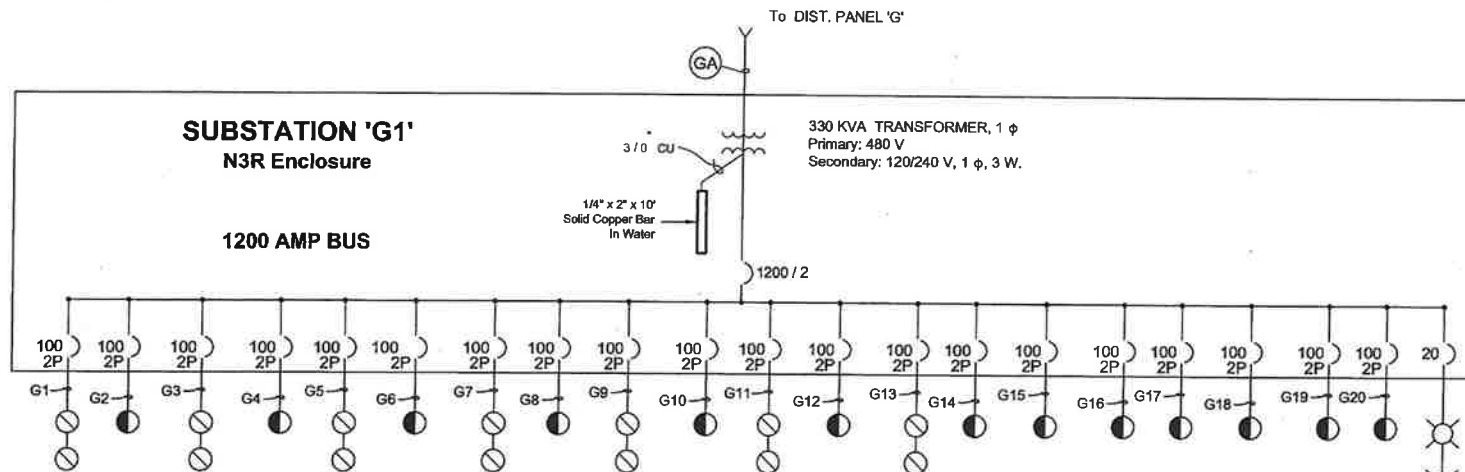
**Substation F2**

Circuit ID	Phase	Voltage	Receptacles					TOTAL	Total Current	Load Factor	Meter Factor	Conduit Size	Conduit Fill Adj.	Effective Current	Breaker Size	Breaker Poles	Wire Length	Wire Type	Resistance	# of Conductors	Wire Size	Ground Size	Voltage Drop %
			20A GFI	30A 120V	50A 120/240V	100A 120/240V	100A 120/208V																
F-17	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	173	THWN	0.19	3	#2	#6	2.47%
F-18	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	173	THWN	0.19	3	#2	#6	2.47%
F-19	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	129	THWN	0.25	3	#3	#6	2.42%
F-20	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	130	THWN	0.25	3	#3	#6	2.44%
F-21	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	85	THWN	0.25	3	#3	#6	1.59%
F-22	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	87	THWN	0.25	3	#3	#6	1.63%
F-23	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	41	THWN	0.25	3	#3	#6	0.77%
F-24	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	44	THWN	0.25	3	#3	#6	0.83%
F-25	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	69	THWN	0.25	3	#3	#6	1.29%
F-26	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	48	THWN	0.25	3	#3	#6	0.87%
F-27	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	113	THWN	0.25	3	#3	#6	2.12%
F-28	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	89	THWN	0.25	3	#3	#6	1.67%
F-29	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	163	THWN	0.19	3	#2	#6	2.33%
F-30	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	132	THWN	0.25	3	#3	#6	2.48%
F-31	1	120 / 240	0	0	1	0	0	1	50.0	100%	90%	3/4"	100%	45.0	50	2	155	THWN	0.49	3	#5	#6	2.84%
F-32	1	120 / 240	0	0	4	0	0	4	200.0	100%	90%	2"	100%	180.0	200	2	195	THWN	0.077	3	#30	#4	1.91%
Light	1	120						0	1.8	100%	100%	TEO	100%	1.8	20	1							

LIGHTS

Project Number: <b>06-3-442</b>		<b>Westpoint Marina</b> 1529 Seaport Blvd. Redwood City, Ca.		<b>Bollinger</b> <b>UNIFLOAT</b>		Electrical Design by: BOLLINGER MARINE 1204 Business Park Drive Union, CA 94588 707-479-0388		Project No. 06-3-442 Design Date: 06-3-442 Design By: E19		City Of Redwood City	
PROJECT MANAGER Ron Nock		Single Line & Feeder Schedule- Substation 'F2'		Ca. Contractor's License No. 44048 Classification: A - C16, C18		Design Date: 06-3-442 Design By: E19		Design Date: 06-3-442 Design By: E19		Design Date: 06-3-442 Design By: E19	



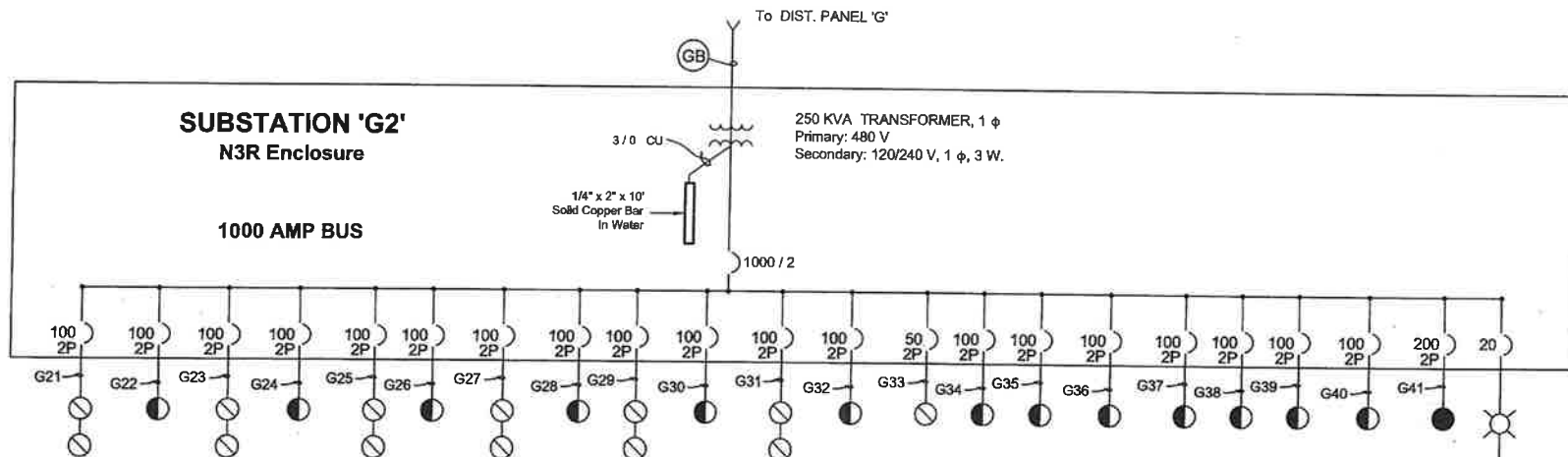


### Substation G1

Circuit ID	Phase	Voltage	Receptacles					TOTAL	Total Current	Load Factor	Motor Factor	Conduit Size	Conduit Fill Adj.	Effective Current	Breaker Size	Breaker Poles	Wire Length	Wire Type	Resistance	# of Conductors	Wire Size	Ground Size	Voltage Drop %
			20A GFI	30A	50A	100A	100A																
G-1	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	158	THWN	0.19	3	#2	#6	2.30%
G-2	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	158	THWN	0.25	3	#3	#6	2.98%
G-3	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	125	THWN	0.25	3	#3	#6	2.34%
G-4	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	135	THWN	0.25	3	#3	#6	2.54%
G-5	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	82	THWN	0.25	3	#3	#6	1.59%
G-6	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	113	THWN	0.25	3	#3	#6	2.12%
G-7	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	44	THWN	0.25	3	#3	#6	0.83%
G-8	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	90	THWN	0.25	3	#3	#6	1.69%
G-9	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	89	THWN	0.25	3	#3	#6	1.29%
G-10	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	88	THWN	0.25	3	#3	#6	1.27%
G-11	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	112	THWN	0.25	3	#3	#6	2.10%
G-12	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	45	THWN	0.25	3	#3	#6	0.85%
G-13	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	155	THWN	0.25	3	#3	#6	2.90%
G-14	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	23	THWN	0.25	3	#3	#6	0.42%
G-15	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	28	THWN	0.25	3	#3	#6	0.48%
G-16	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	48	THWN	0.25	3	#3	#6	0.91%
G-17	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	71	THWN	0.25	3	#3	#6	1.33%
G-18	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	84	THWN	0.25	3	#3	#6	1.75%
G-19	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	116	THWN	0.25	3	#3	#6	2.19%
G-20	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	130	THWN	0.25	3	#3	#6	2.60%
Light	1	120						0	1.6	100%	100%	1/2"	100%	1.6	20	1				3	#3	#6	2.60%

LIGHTS

Project Number: <b>06-3-442</b>	<b>Westpoint Marina</b> 1529 Seaport Blvd. Redwood City, Ca.	 	Electrical Design by: BELLINGHAM MARINE INDUSTRIES, INC. 1205 Business Park Drive Glen, CA 95027 707-475-3360 City of Redwood City
PROJECT MANAGER Ren Mock	<b>Single Line &amp; Feeder Schedule- Substation 'G1'</b>		
REVISIONS 11-3-07 Electrical Permit Submittal #1 DATE	City of Redwood City APPROVED BY: [Signature] DATE: 11-3-07 DRAWN BY: [Signature] DATE: 11-3-07		

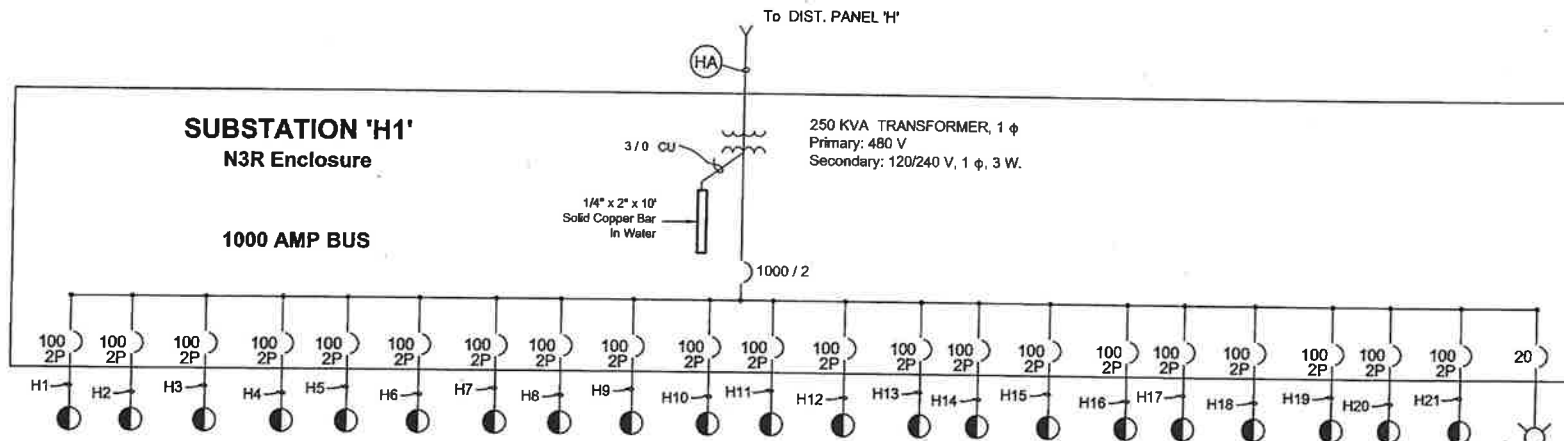


**Substation G2**

Circuit ID	Phase	Voltage	Receptacles					TOTAL	Total Current	Load Factor	Motor Factor	Conduit Size	Conduit Fill Adj.	Effective Current	Breaker Size	Breaker Poles	Wire Length	Wire Type	Resistance	# of Conductors	Wire Size	Ground Size	Voltage Drop %
			20A GFI	30A	50A	100A	120/240V																
G21	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	180	THHN	0.25	3	#3	#6	3.00%
G22	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	158	THHN	0.25	3	#3	#6	2.86%
G23	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	117	THHN	0.25	3	#3	#6	2.20%
G24	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	135	THHN	0.25	3	#3	#6	2.54%
G25	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	74	THHN	0.25	3	#3	#6	1.35%
G26	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	113	THHN	0.25	3	#3	#6	2.12%
G27	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	47	THHN	0.25	3	#3	#6	0.89%
G28	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	90	THHN	0.25	3	#3	#6	1.69%
G29	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	76	THHN	0.25	3	#3	#6	1.43%
G30	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	69	THHN	0.25	3	#3	#6	1.27%
G31	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	119	THHN	0.25	3	#3	#6	2.34%
G32	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	45	THHN	0.25	3	#3	#6	0.89%
G33	1	120 / 240	0	0	1	0	0	1	50.0	100%	90%	3/4"	100%	45.0	50	2	147	THHN	0.49	3	#6	#6	2.71%
G34	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	23	THHN	0.25	3	#3	#6	0.42%
G35	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	25	THHN	0.25	3	#3	#6	0.49%
G36	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	46	THHN	0.25	3	#3	#6	0.91%
G37	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	71	THHN	0.25	3	#3	#6	1.33%
G38	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	94	THHN	0.25	3	#3	#6	1.75%
G39	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	116	THHN	0.25	3	#3	#6	2.19%
G40	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	139	THHN	0.25	3	#3	#6	2.60%
G41	1	120 / 240	0	0	4	0	0	4	200.0	100%	90%	2"	100%	180.0	200	2	149	THHN	0.077	3	#30	#4	1.73%
Light	1	120						0	1.7	100%	100%	TBD	100%	1.7	30	1							

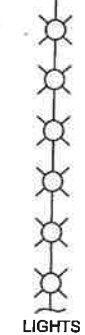
LIGHTS

11-2-87 NO. DATE Electrical Permit Submitted #1 06-3-442	Project Number: <b>06-3-442</b> PROJECT MANAGER: Ron Mock	<b>Westpoint Marina</b> 1529 Seaport Blvd. Redwood City, Ca.  <b>Single Line &amp; Feeder Schedule- Substation 'G2'</b>	  <small>Bellingham Electric is a subsidiary of Bellingham Electric, Inc. and is not responsible for the design or construction of the project. The design and construction of the project are the responsibility of the client and the contractor.</small>	Electrical Design by: BELLINGHAM ELECTRIC 1529 Seaport Blvd. Redwood City, Ca. 94063 760-476-2581 Co. Contractor's License No. 424849 Classification: A, C16, C18	SHEET OF 31 OF 34 E21	City Of Redwood City  RECEIVED BY DATE
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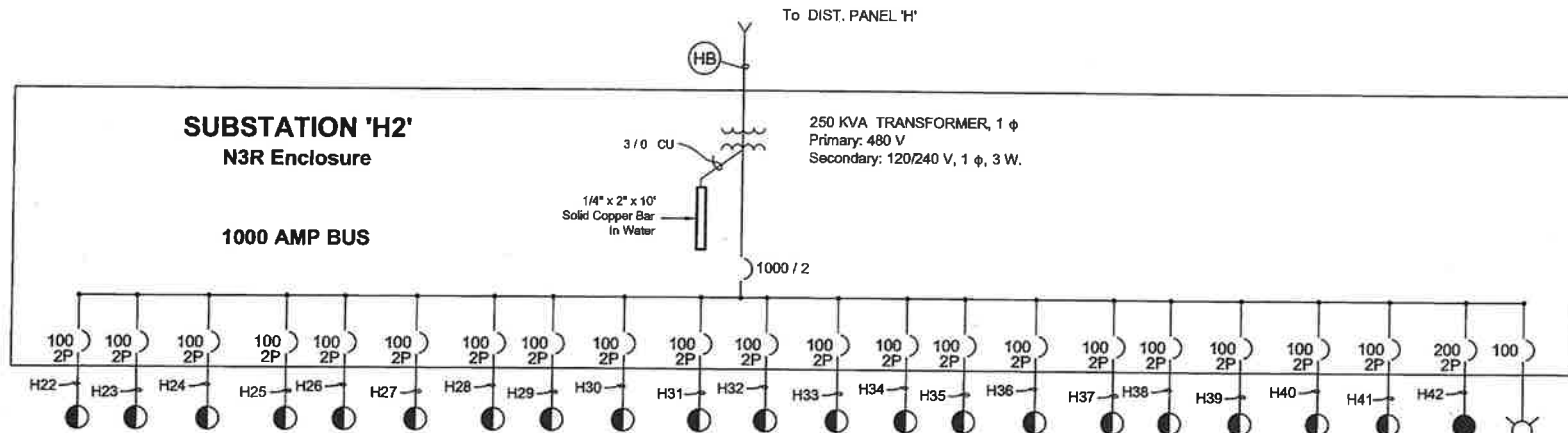


**Substation H1**

Circuit ID	Phase	Voltage	Receptacles					TOTAL	Total Current	Load Factor	Meter Factor	Conduit Size	Conduit Fill Adj.	Effective Current	Breaker Size	Breaker Poles	Wire Length	Wire Type	Resistance	# of Conductors	Wire Size	Ground Size	Voltage Drop %
			30A GF	30A 120V	30A 120/240V	100A 120/240V	100A 120/208V																
H1	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	155	THHN	0.25	3	#5	#6	2.90%
H2	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	73	THHN	0.25	3	#5	#6	1.53%
H3	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	132	THHN	0.25	3	#5	#6	2.45%
H4	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	48	THHN	0.25	3	#5	#6	0.81%
H5	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	110	THHN	0.25	3	#5	#6	2.09%
H6	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	24	THHN	0.25	3	#5	#6	0.44%
H7	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	67	THHN	0.25	3	#5	#6	1.63%
H8	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	28	THHN	0.25	3	#5	#6	0.52%
H9	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	65	THHN	0.25	3	#5	#6	1.21%
H10	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	33	THHN	0.25	3	#5	#6	0.89%
H11	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	42	THHN	0.25	3	#5	#6	0.75%
H12	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	25	THHN	0.25	3	#5	#6	0.46%
H13	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	47	THHN	0.25	3	#5	#6	0.89%
H14	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	70	THHN	0.25	3	#5	#6	1.45%
H15	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	92	THHN	0.25	3	#5	#6	1.31%
H16	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	77	THHN	0.25	3	#5	#6	1.45%
H17	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	115	THHN	0.25	3	#5	#6	2.10%
H18	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	104	THHN	0.25	3	#5	#6	1.90%
H19	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	136	THHN	0.25	3	#5	#6	2.56%
H20	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	122	THHN	0.25	3	#5	#6	2.42%
H21	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	160	THHN	0.25	3	#5	#6	3.00%
Light	1	120						0	1.3	100%	100%	780	100%	1.3	20	1				3	#5	#6	3.00%



Project Number: <b>06-3-442</b>		<b>Westpoint Marina</b> 1529 Seaport Blvd. Redwood City, Ca.		<b>Bellingham</b> Electrical Engineering		Electrical Design by BELLINGHAM MARINE 1529 Seaport Blvd. Redwood City, CA 94063 415-438-2389		City Of Redwood City	
PROJECT MANAGER Ron Mock		Single Line & Feeder Schedule- Substation 'H1'		CA Contractor's License No. 40449 Classification: A, C16, C18		Sheet 33 of 34 Date: 02/22/06		City Of Redwood City	

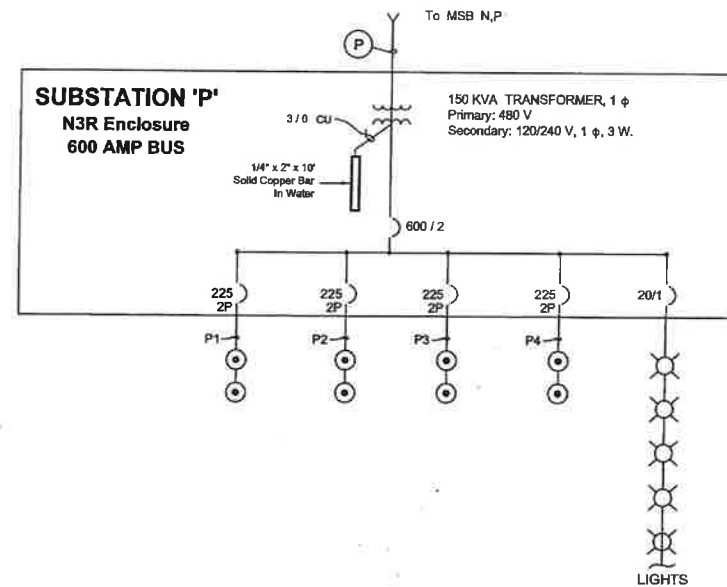
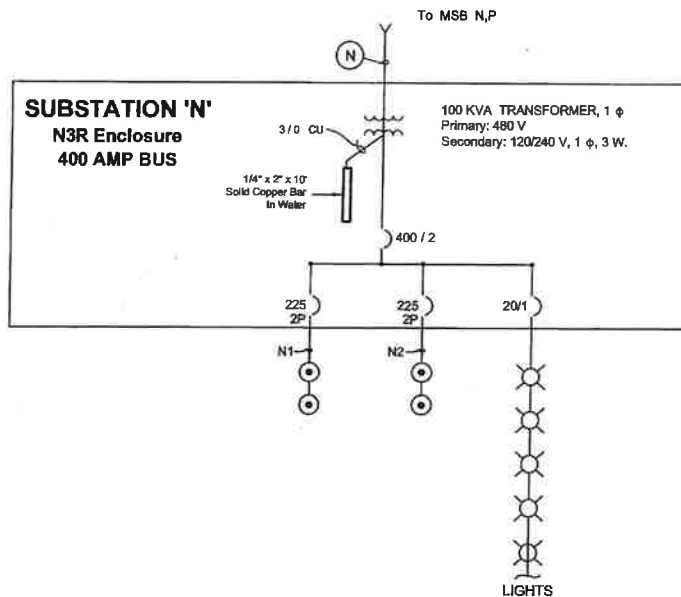


**Substation H2**

Circuit ID	Phase	Voltage	Breakers					TOTAL	Total Current	Load Factor	Meter Factor	Conduit Size	Conduit Fill Adj.	Effective Current	Breaker Size	Breaker Poles	Wire Length	Wire Type	Resistance	# of Conductors	Wire Size	Ground Size	Voltage Drop
			20A GFI	30A 120V	30A 120/240V	100A 120/240V	100A 120/207V																
H22	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	124	TH-HAN	0.25	3	#5	#5	2.32%
H23	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	112	TH-HAN	0.25	3	#5	#5	2.10%
H24	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	99	TH-HAN	0.25	3	#5	#5	1.86%
H25	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	89	TH-HAN	0.25	3	#5	#5	1.67%
H26	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	73	TH-HAN	0.25	3	#5	#5	1.32%
H27	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	62	TH-HAN	0.25	3	#5	#5	1.22%
H28	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	48	TH-HAN	0.25	3	#5	#5	0.91%
H29	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	44	TH-HAN	0.25	3	#5	#5	0.83%
H30	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	24	TH-HAN	0.25	3	#5	#5	0.44%
H31	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	27	TH-HAN	0.25	3	#5	#5	0.50%
H32	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	26	TH-HAN	0.25	3	#5	#5	0.50%
H33	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	45	TH-HAN	0.25	3	#5	#5	0.85%
H34	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	53	TH-HAN	0.25	3	#5	#5	0.99%
H35	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	68	TH-HAN	0.25	3	#5	#5	1.27%
H36	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	77	TH-HAN	0.25	3	#5	#5	1.45%
H37	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	92	TH-HAN	0.25	3	#5	#5	1.69%
H38	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	108	TH-HAN	0.25	3	#5	#5	1.94%
H39	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	113	TH-HAN	0.25	3	#5	#5	2.12%
H40	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	129	TH-HAN	0.25	3	#5	#5	2.42%
H41	1	120 / 240	0	0	2	0	0	2	100.0	100%	90%	1-1/4"	100%	90.0	100	2	138	TH-HAN	0.25	3	#5	#5	2.59%
H42	1	120 / 240	0	0	4	0	0	4	200.0	100%	90%	2"	100%	190.0	200	2	140	TH-HAN	0.077	3	#10	#4	1.61%
Light	1	120	Lighting Circuit					0	1.5	100%	100%	1/2"	100%	1.5	20	1							

LIGHTS

Project Number: <b>06-3-442</b>		<b>Westpoint Marina</b> 1529 Seaport Blvd. Redwood City, Ca.		<b>Bellingham</b> 1305 Business Park Drive Bellingham, WA 98203 360-863-2383		Electrical Design by: BELLINGHAM MARINE 1305 Business Park Drive Bellingham, WA 98203 360-863-2383		City of Redwood City	
PROJECT MANAGER Ron Mock		Single Line & Feeder Schedule- Substation 'H2'		C.A. Computer's Utilities Inc. 45008 Cedar Rapids, IA 52405		3/11/06 3/11/06 3/11/06		3/11/06 3/11/06 3/11/06	



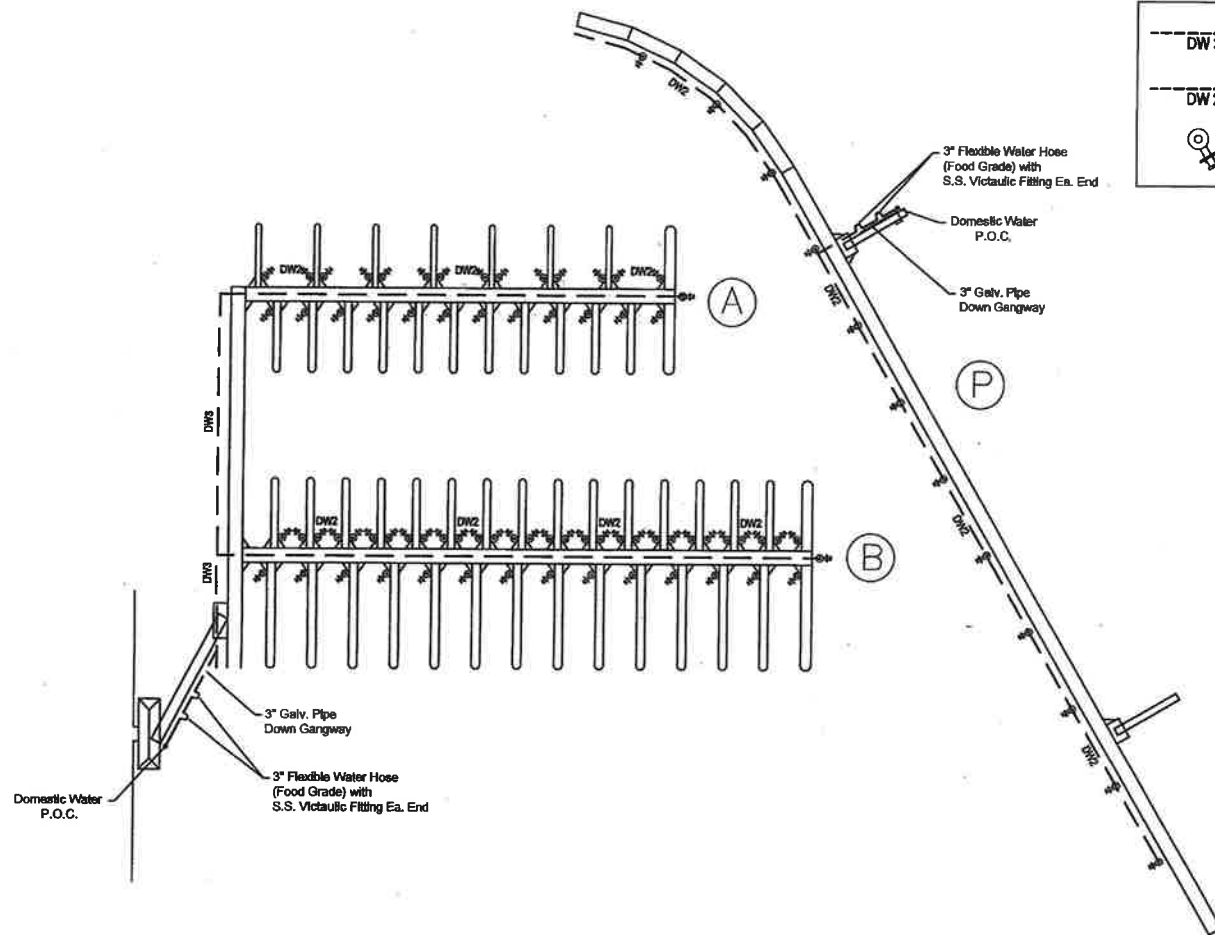
**Substation N**

Circuit ID	Phase	Voltage	Receptacles				TOTAL	Total Current	Load Factor	Meter Factor	Conduit Size	Conduit Fill Adj.	Effective Current	Breaker Size	Breaker Poles	Wire Length	Wire Type	Resistance	# of Conductors	Wire Size	Ground Size	Voltage Drop %
			20A GFI	30A 120V	50A 120/240V	100A 120/240V																
N-1	1	120 / / 240	0	4	4	0	8	250.0	90%	90%	2"	100%	210.6	225	2	185	THWN	0.062	3	#4/0	#4	1.80%
N-2	1	120 / / 240	0	4	4	0	8	250.0	90%	90%	2"	100%	210.6	225	2	185	THWN	0.062	3	#4/0	#4	1.80%
Light	1	120					0	0.5	100%	100%			0.5	20	1							

**Substation P**

Circuit ID	Phase	Voltage	Receptacles				TOTAL	Total Current	Load Factor	Meter Factor	Conduit Size	Conduit Fill Adj.	Effective Current	Breaker Size	Breaker Poles	Wire Length	Wire Type	Resistance	# of Conductors	Wire Size	Ground Size	Voltage Drop %
			20A GFI	30A 120V	50A 120/240V	100A 120/240V																
P-1	1	120 / / 240	0	4	4	0	8	260.0	90%	90%	2"	100%	210.6	225	2	263	THWN	0.062	3	#4/0	#4	2.87%
P-2	1	120 / / 240	0	4	4	0	8	260.0	90%	90%	2"	100%	210.6	225	2	127	THWN	0.062	3	#4/0	#4	1.35%
P-3	1	120 / / 240	0	4	4	0	8	260.0	90%	90%	2"	100%	210.6	225	2	127	THWN	0.062	3	#4/0	#4	1.35%
P-4	1	120 / / 240	0	4	4	0	8	260.0	90%	90%	2"	100%	210.6	225	2	263	THWN	0.062	3	#4/0	#4	2.87%
Light	1	120					0	0.9	100%	100%			0.9	20	1							

11-2-87 NO. DATE DESCRIPTION REVISIONS	Project Number: <b>06-3-442</b> PROJECT MANAGER Ron Mock	<b>Westpoint Marina</b> 1529 Seaport Blvd. Redwood City, Ca.  Single Line & Feeder Schedule- Substations 'N' & 'P'	<b>Bellingham</b> 1501 1st Ave. Bellingham, WA 98201 (206) 835-1111	Electrical Design by BELLINGHAM ENGINEERING, INC. 1501 1st Ave. Bellingham, WA 98201 (206) 835-1111 Co. Designer's License No. 42440 Classification: A, C10, C18	City Of Redwood City  OFFICIAL SEAL E24
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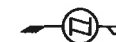


- DW3 --- = 3" HDPE PIPE REDUCE TO 3/4" @ MAIN  
 RUN TO FEED ALL HOSEBIBBS  
 --- DW2 --- = 2" HDPE PIPE REDUCE TO 3/4" @ MAIN  
 RUN TO FEED ALL HOSEBIBBS  
 (C) = 1/2" HOSE BIBB  
 (w/ Non-Removable Backflow Device)

# **DOMESTIC WATER PLAN**

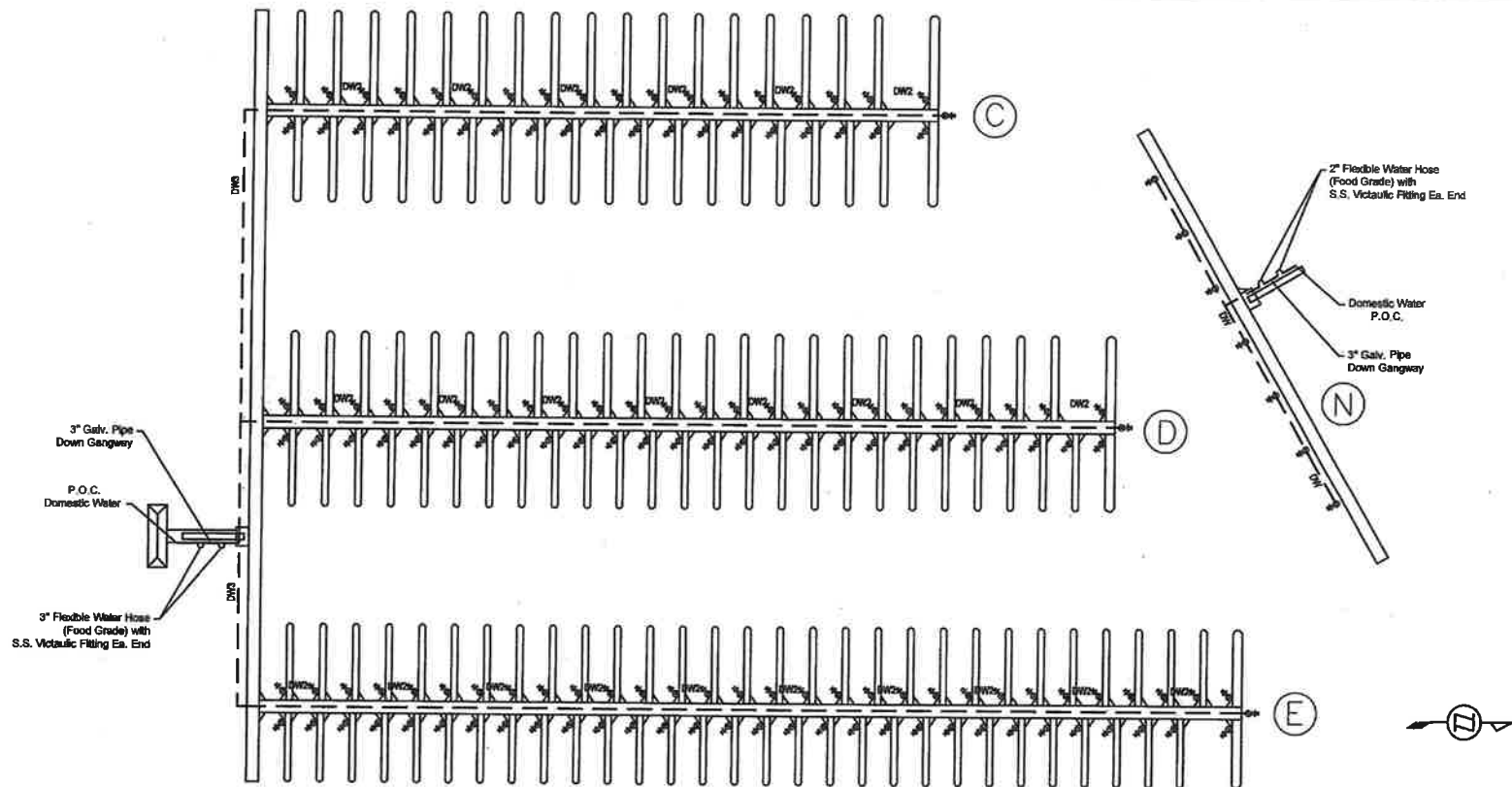
## **MAIN FEED AND ROUTING PLAN**

ALL FEED LINES BETWEEN FLEX FITTING  
 (DOWN GANGWAY) TO BE GALVANIZED



Project Number: <b>06-3-442</b>			<b>Westpoint Marina</b> Redwood City, Ca.		<b>Bollinger</b> CONSULTING ENGINEERS 1000 S. GATEWAY BLVD., SUITE 200 SAN ANTONIO, TEXAS 78204 (214) 591-1111 FAX (214) 591-1112 WWW.BOLLINGER-CE.COM		City Of Redwood City	
PROJECT MANAGER: _____			<b>Domestic Water Layout Dock A,B and P</b>		SHEET 1 OF 5 DW1		DATE: _____ BY: _____	
REVISIONS NO. DATE DESCRIPTION BY								





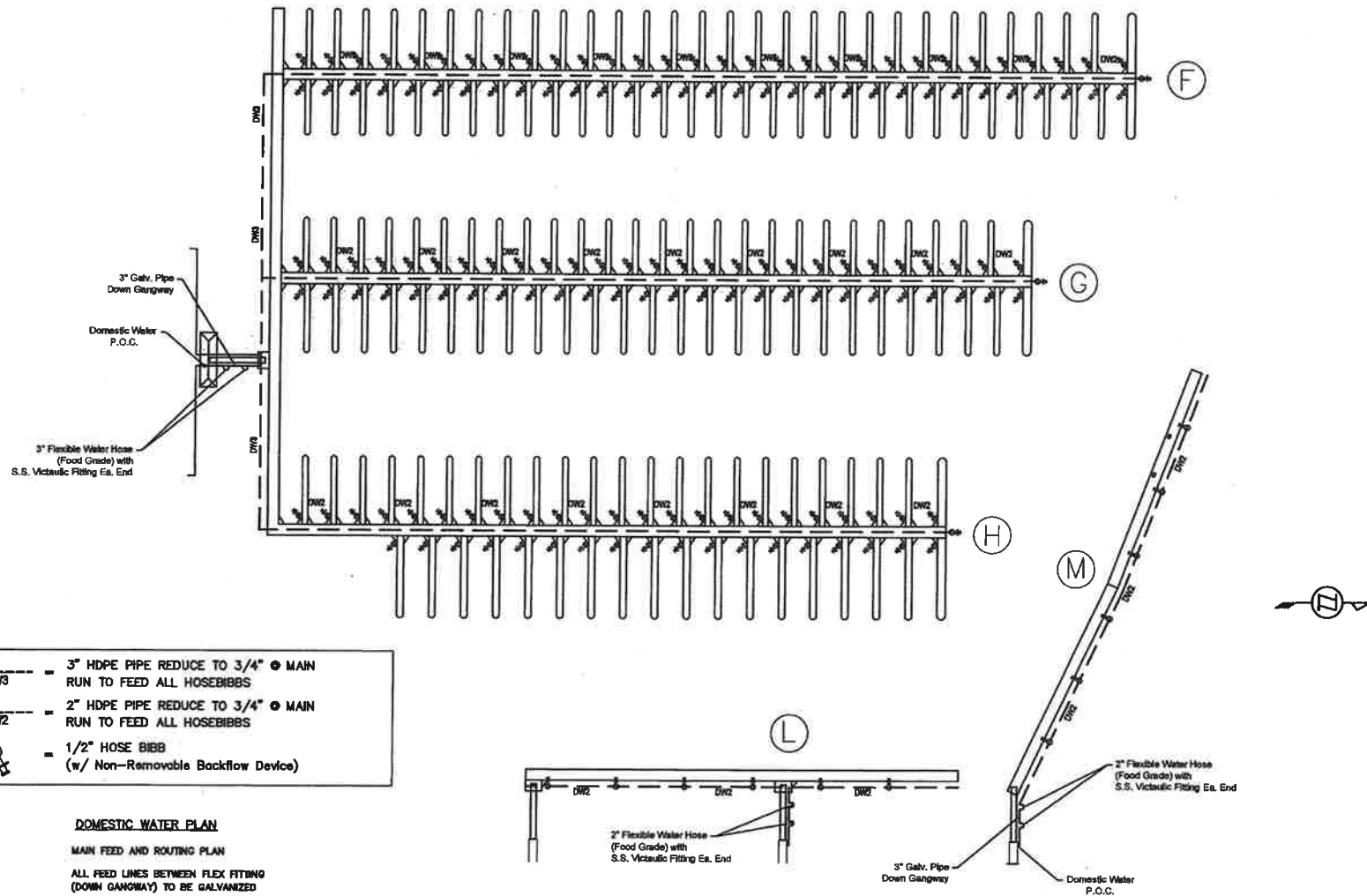
---	DW3	=	3" HDPE PIPE REDUCE TO 3/4" ● MAIN RUN TO FEED ALL HOSEBIBBS
---	DW2	=	2" HDPE PIPE REDUCE TO 3/4" ● MAIN RUN TO FEED ALL HOSEBIBBS
○		=	1/2" HOSE BIBB (w/ Non-Removable Backflow Device)

#### DOMESTIC WATER PLAN

MAIN FEED AND ROUTING PLAN

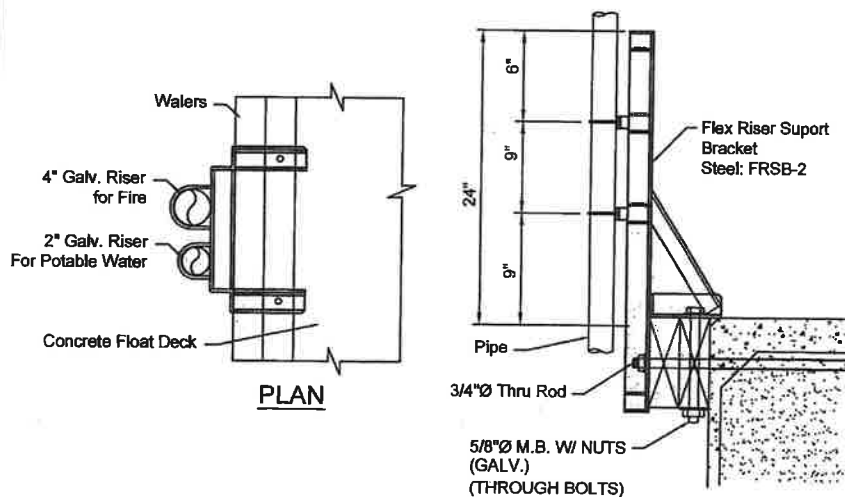
ALL FEED LINES BETWEEN FLEX FITTING  
(DOWN GANGWAY) TO BE GALVANIZED

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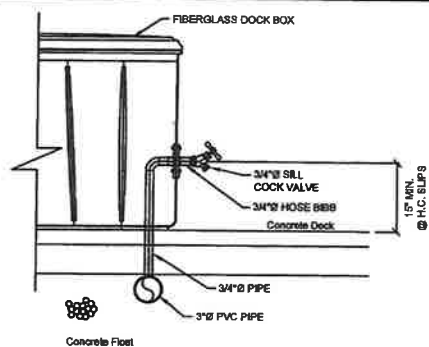


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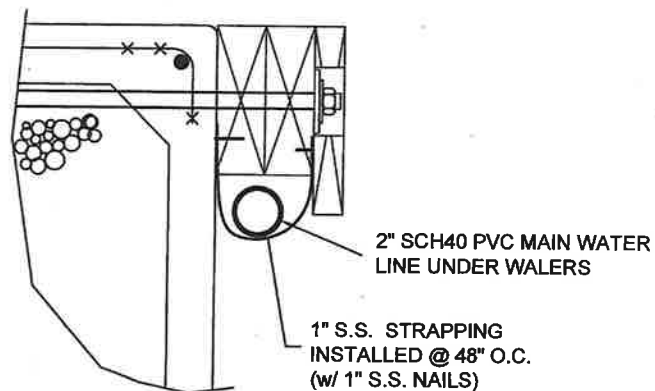
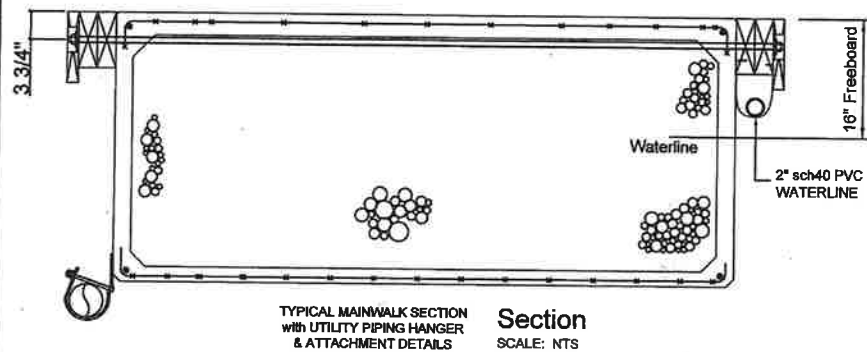
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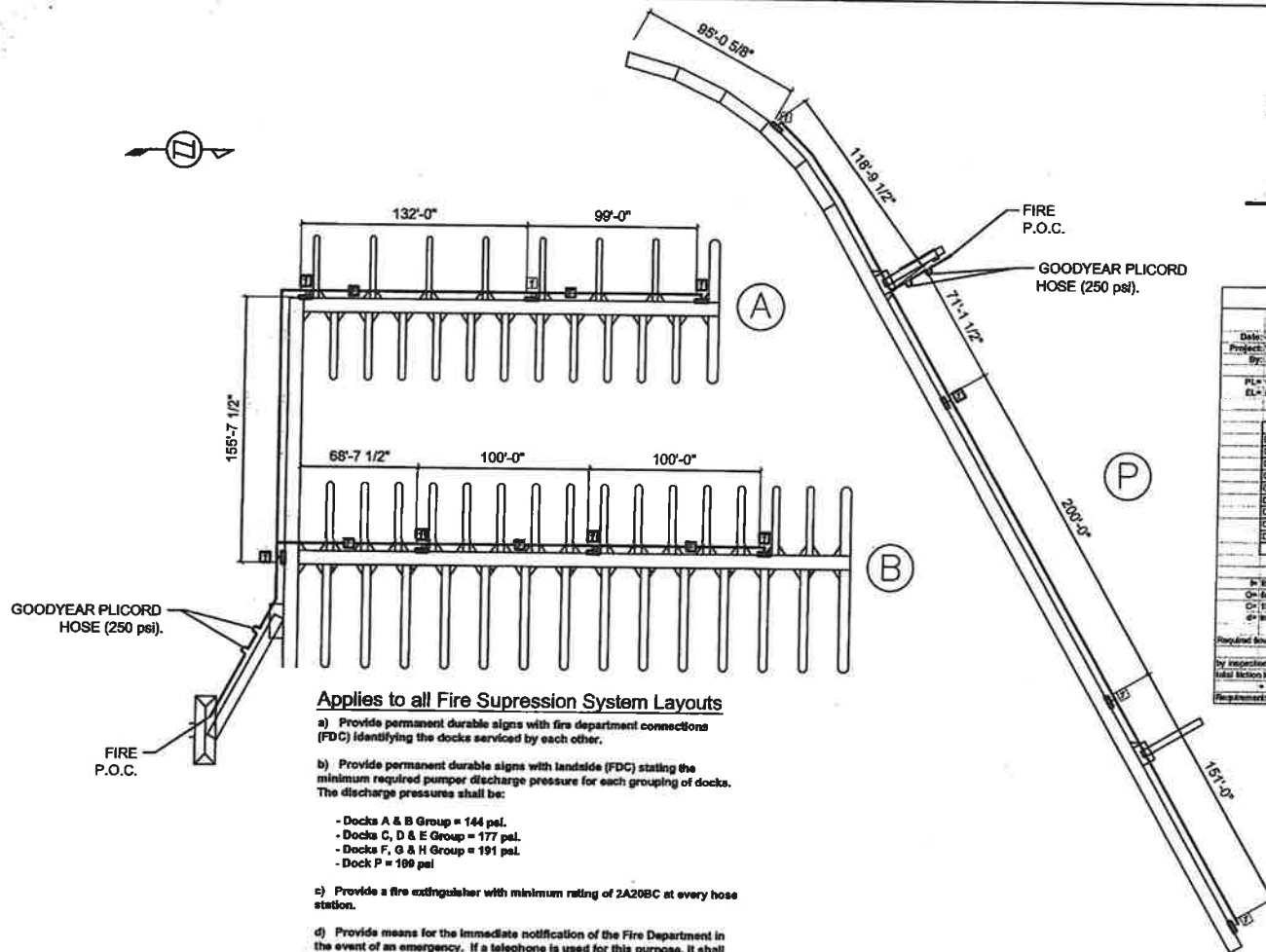
**PIPE SUPPORT**  
SCALE: NTS



Typ. Dock Box-Mounted Hose Bibb  
Install All Hose Bibbs At Dock Box Locations (One For Each Service)



NO. DATE DESCRIPTION BY	REVISIONS	Project Number: <b>06-3-442</b>  PROJECT MANAGER	<b>Westpoint Marina</b> Redwood City, Ca.  <b>Domestic Water Details</b>		SHEET No. 5 of 5 DRAWING No. 06-3-442 SCALE: 1/4" = 1'-0" DATE: 10/1/06 DRAWN BY: DLS	City Of Redwood City
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# **FIRE SUPPRESSION SYSTEM**

FIRE SYSTEM FEED AND ROUTING PLAN  
ALL FEED LINES BETWEEN FLEX FITTING  
(DOWN GANGWAY) TO BE GALVANIZED  
STEEL PIPE

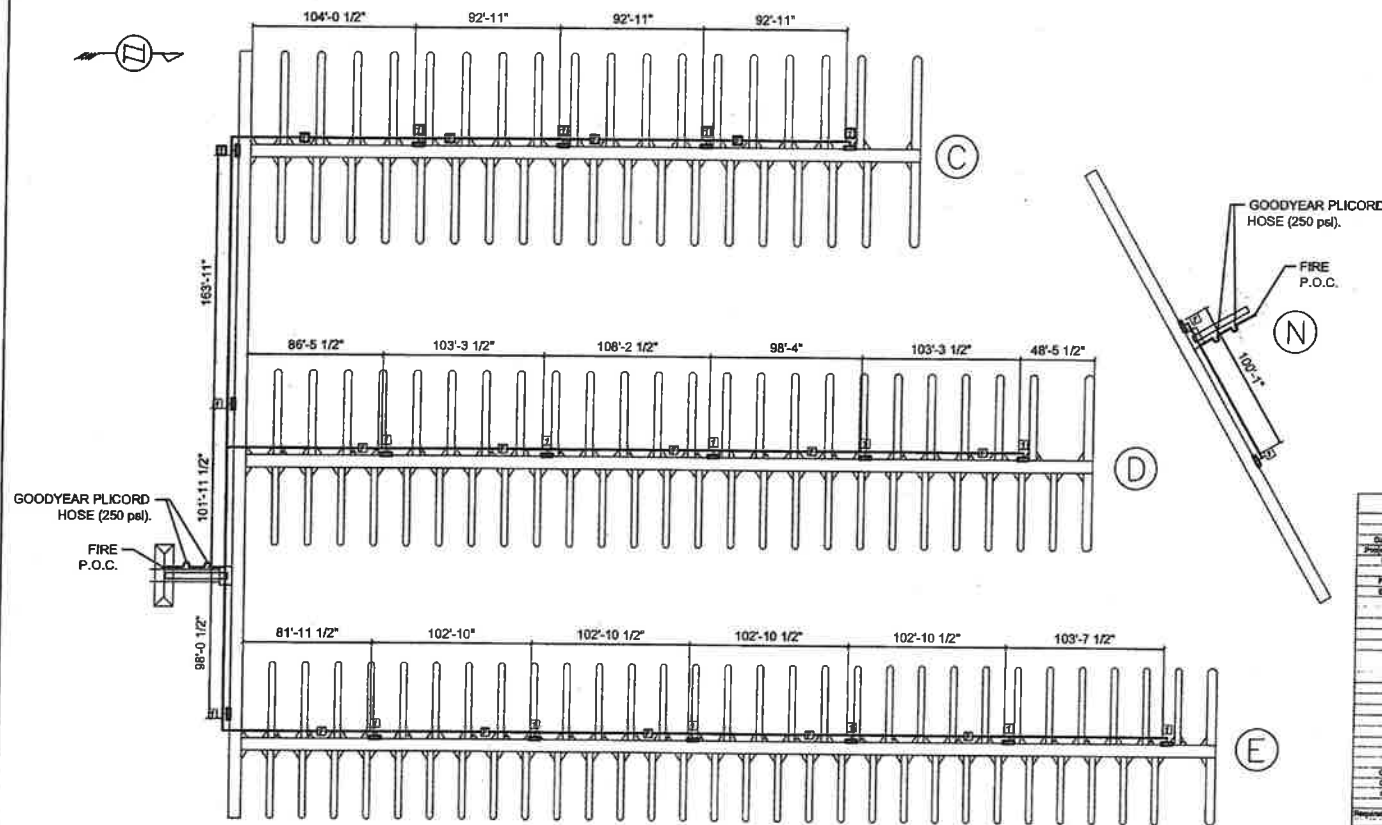
- = 4" FIRE MAIN LINE (HOPE)
- = FIBERGLASS FIRE HOSE CABINET (FRP WHITE) with 100' HOSE and EXTINGUISHER

Fire System Flow Calculations					
Date: 10/20/2006					
Project: Westpoint Marina					
By: JRP					
PL = Calculated Length of Pipe, including pumper, dock and risers					
EL = Equivalent Length of pipe calculated for fittings					
Area Description	PL	90°s	45°s	EL	Total PL
Dock A	300	7	3	130	530
Dock B	290	6	3	120	415
Dock C	730	7	7	210	945
Dock D	800	6	6	180	992
Dock E	750	7	6	180	922
Dock F	670	7	6	200	883
Dock G	600	6	6	180	831
Dock H	610	7	5	170	792
Dock P	910	6	3	120	939
Friction loss per foot of pipe, psi					
On flow to pipe, 10 gpm					
C = 150 for HOPE pipe					
d = inside diameter of pipe = 3.062" for 4" HOPE					
Required flow = 100 gpm @ 15 psi					
Loss per foot = .002620					
By inspection the largest pipe size = 1100					
Initial friction loss = 1100 x .002620					
= 4.25275 psi					
Requirements dictate 100 gpm @ 15 psi, therefore include connection should provide 100 gpm @ 15 psi minimum					

## **Applies to all Fire Suppression System Layouts**

- Provide permanent durable signs with fire department connections (FDC) identifying the docks serviced by each other.
- Provide permanent durable signs with landside (FDC) stating the minimum required pumper discharge pressure for each grouping of docks. The discharge pressures shall be:
  - Docks A & B Group = 144 psi.
  - Docks C, D & E Group = 177 psi.
  - Docks F, G & H Group = 191 psi.
  - Dock P = 180 psi
- Provide a fire extinguisher with minimum rating of 2A20BC at every hose station.
- Provide means for the immediate notification of the Fire Department in the event of an emergency. If a telephone is used for this purpose, it shall be available to use at all times and shall not require a coin to operate. The address of the facility (1529 Seaport Blvd.) and the emergency phone number(s) shall be displayed prominently on a sign at the telephone (UFC Appendix B-C Section 7 & NFPA 303 Section 4.9)

Project Number:		Westpoint Marina		Bellingham		Date: 10/20/2006		City Of Redwood City	
06-3-442		Redwood City, Ca.		UNPLD.		Drawn by: S. Hildner			
Project Manager		Fire System Layout: Docks A, B & P				Checked by:			
						Drawing Number:			
						Scale: 1" = 10'			
						Drawing Number: FS1			



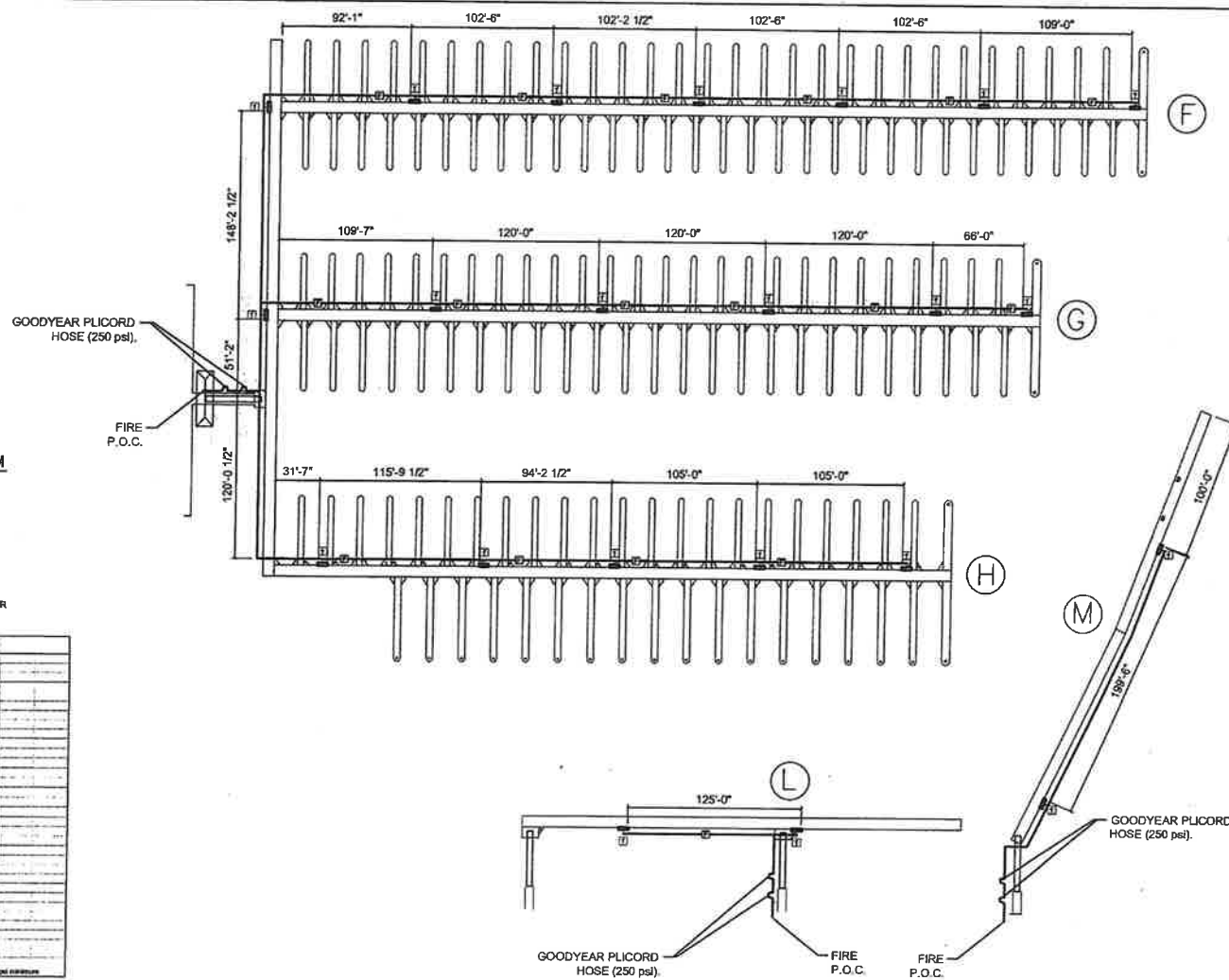
### FIRE SUPPRESSION SYSTEM

FIRE SYSTEM FEED AND ROUTING PLAN  
ALL FEED LINES BETWEEN FLEX FITTING  
(DOWN GANGWAY) TO BE GALVANIZED  
STEEL PIPE

- = 4" FIRE MAIN LINE (HDPE)
- = FIBERGLASS FIRE HOSE CABINET (FRP WHITE) with 100' HOSE and EXTINGUISHER



### Fire System Flow Calculations

Date: 6/28/2008					
Project: Westpoint Marina					
By: JF					
PL = Calculated Length of Pipe, including program, deck and floor					
EL = Equivalent Length of pipe calculated by fittings					
Area Description	PL	EL	ET	EL	Total PL
Deck A	340	0	0	0	340
Deck B	290	0	0	0	290
Deck C	220	0	0	0	220
Deck D	220	0	0	0	220
Deck E	220	0	0	0	220
Deck F	220	0	0	0	220
Deck G	220	0	0	0	220
Deck H	220	0	0	0	220
Deck I	220	0	0	0	220
Deck J	220	0	0	0	220
Deck K	220	0	0	0	220
Deck L	220	0	0	0	220
Deck M	220	0	0	0	220
Deck N	220	0	0	0	220
Deck O	220	0	0	0	220
Deck P	220	0	0	0	220
Deck Q	220	0	0	0	220
Deck R	220	0	0	0	220
Deck S	220	0	0	0	220
Deck T	220	0	0	0	220
Deck U	220	0	0	0	220
Deck V	220	0	0	0	220
Deck W	220	0	0	0	220
Deck X	220	0	0	0	220
Deck Y	220	0	0	0	220
Deck Z	220	0	0	0	220
Deck AA	220	0	0	0	220
Deck AB	220	0	0	0	220
Deck AC	220	0	0	0	220
Deck AD	220	0	0	0	220
Deck AE	220	0	0	0	220
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Deck AG	220	0	0	0	220
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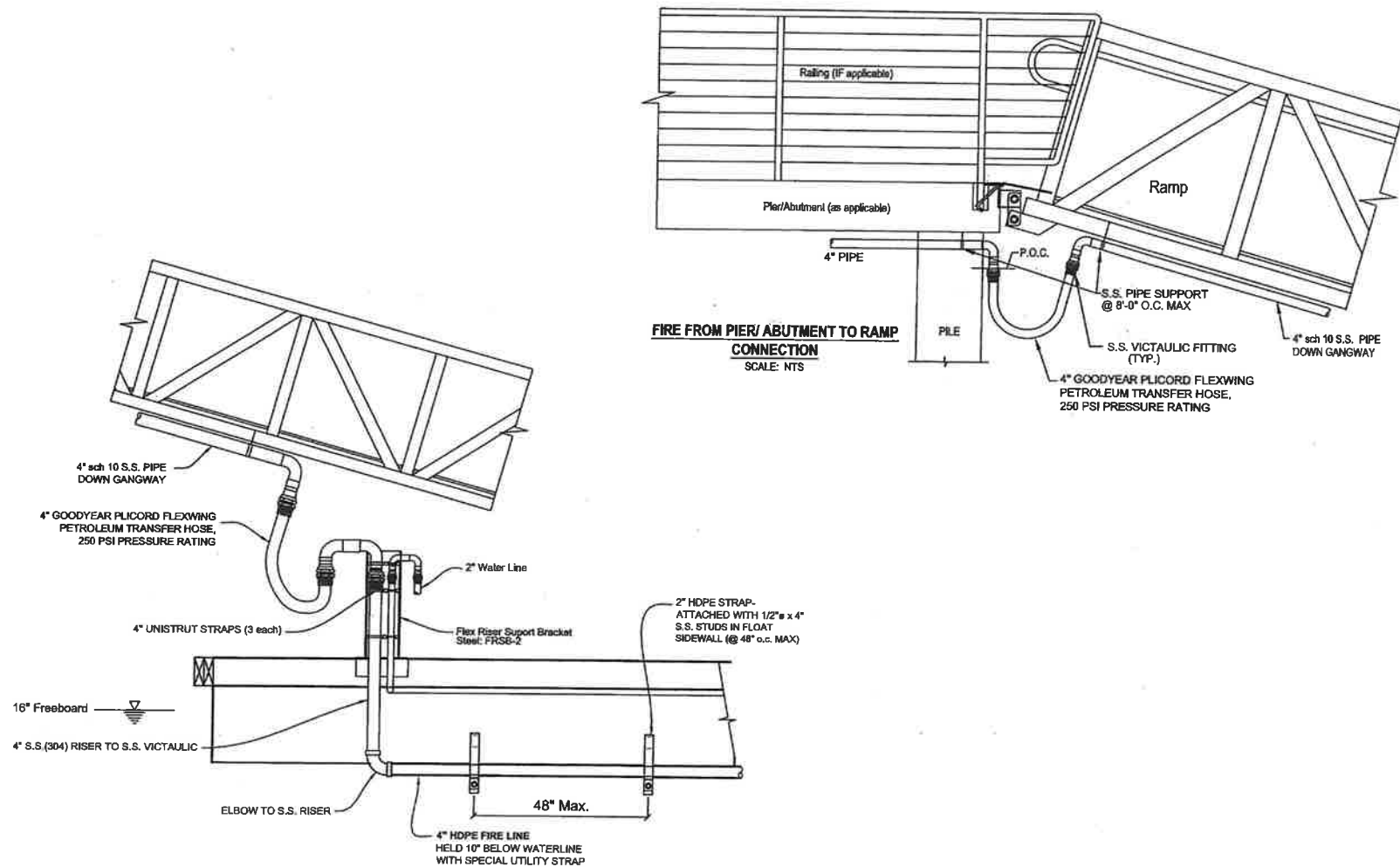


## FIRE SUPPRESSION SYSTEM

**FIRE SYSTEM FEED AND ROUTING PLAN  
ALL FEED LINES BETWEEN FLEX FITTING  
(DOWN GANGWAY) TO BE GALVANIZED  
STEEL PIPE**

-  = 4" FIRE MAIN LINE (HDPE)  
 = FIBERGLASS FIRE HOSE CABINET (FRP WHITE) with 100' HOSE and EXTINGUISHER

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NO.	DATE	DESCRIPTION	BY
1	11-0-07	Fire System Submittal- First Submittal	DO
REVISIONS			

Project Number:  
**06-3-442**

PROJECT MANAGER

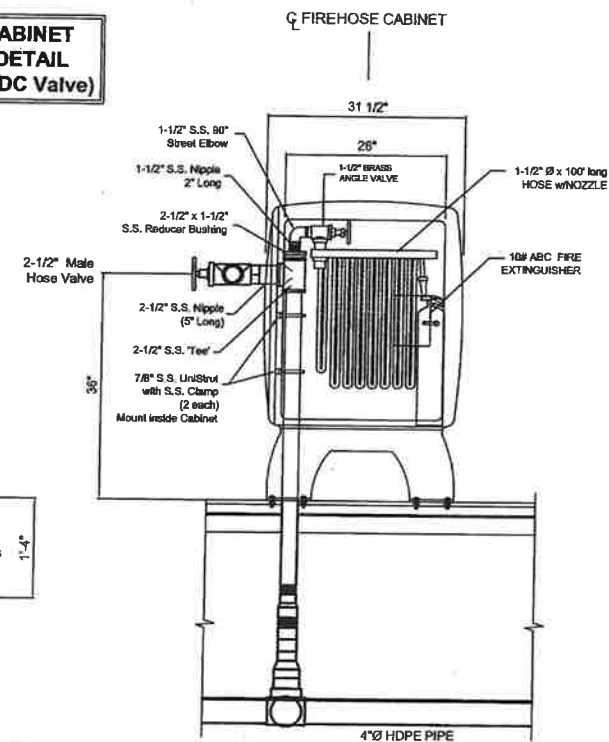
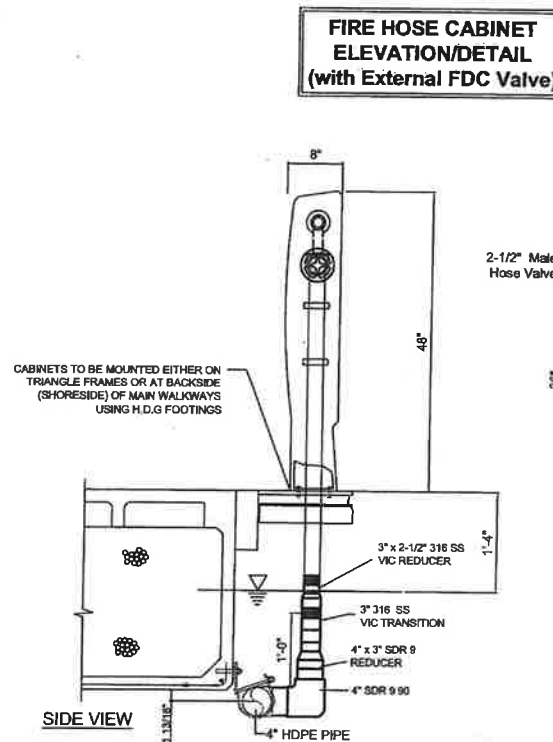
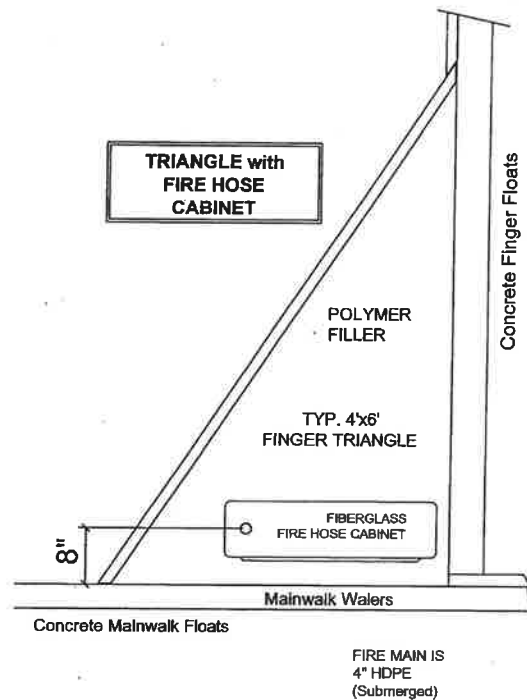
**Westpoint Marina**  
Redwood City, Ca.

**Fire System Details**



DATE	11-0-07	CITY OF REDWOOD CITY
DESIGNED BY	DO	
CHECKED BY	DO	
APPROVED BY	DO	
DESIGNED BY	DO	
CHECKED BY	DO	
APPROVED BY	DO	
DESIGNED BY	DO	
CHECKED BY	DO	
APPROVED BY	DO	
DESIGNED BY	DO	
CHECKED BY	DO	
APPROVED BY	DO	





NO.	DATE	REVISIONS	BY	DO
11-4-87		Fire System Submittal: Final Submittal		
11-4-87		Fire System Submittal: Final Submittal		
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11-4-87		Fire System Submittal: Final Submittal		
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Project Number:  
**06-3-442**

PROJECT MANAGER

**Westpoint Marina**  
Redwood City, Ca.

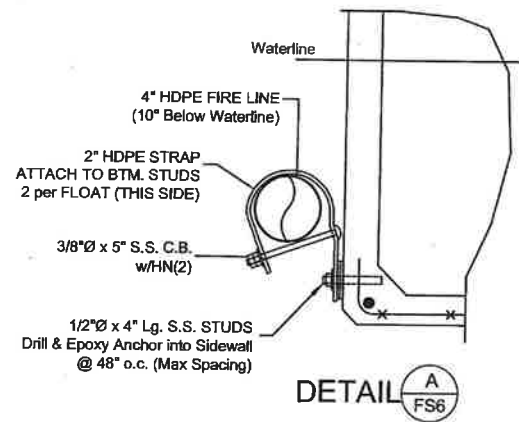
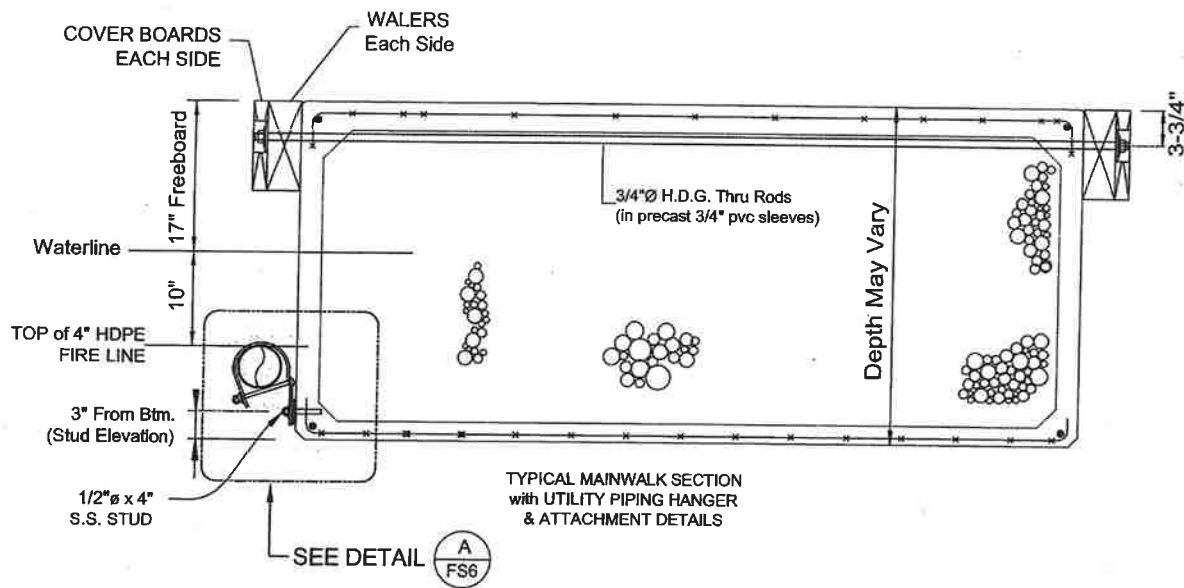
**Fire System Details**

**Bellingham**  
**UNIFLOUT**

The following information is provided for your information and is not intended to be a part of the contract documents. It is the responsibility of the user to verify the accuracy of the information and to ensure that it is used in accordance with the applicable codes and standards.

DATE: 11-4-87  
DRAWN BY: S. HARRISON  
CHECKED BY: S. HARRISON  
APPROVED BY: S. HARRISON  
CITY OF REDWOOD CITY

DATE: 11-4-87  
DRAWN BY: S. HARRISON  
CHECKED BY: S. HARRISON  
APPROVED BY: S. HARRISON



NO.	DATE	REVISIONS	BY
1	11-8-07	Fire System Submittal - First Submittal	DO

Project Number:  
**06-3-442**

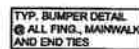
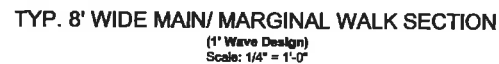
PROJECT MANAGER

**Westpoint Marina**  
Redwood City, Ca.

**Fire System Details**

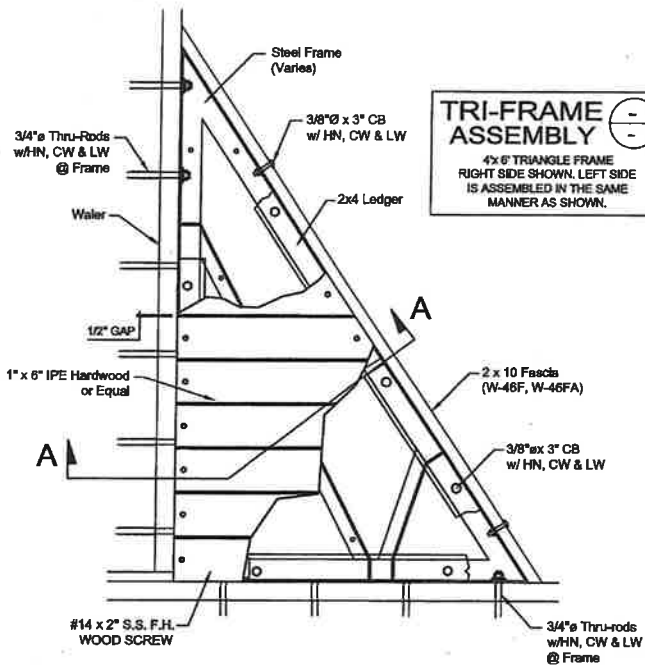


NAME: Al. Haddad	CITY OF REDWOOD CITY
DESIGN BY: S. Haddad	
CHECKED BY: -	
DATE: 11-8-07	
SCALE: 1" = 8'	
PROJECT NO: FS6	
DATE: 11-8-07	
SCALE: 1" = 8'	

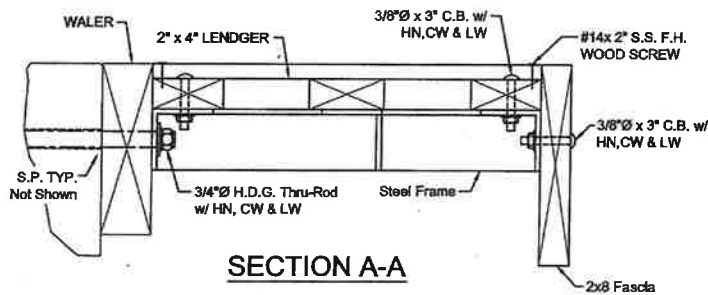


1. CLEATS ARE TO BE INSTALLED AS CLOSE AS POSSIBLE TO CENTER OF WALERS.
2. CLEATS MUST NOT STRADDLE TRUSS RODS.
3. CLEATS AT TRIANGLE FRAMES SHALL BE AS CLOSE AS CONDITIONS PERMIT TO ANGLE POINT.
4. MIDPOINT CLEATS SHOULD BE CENTERED AS CONDITIONS PERMIT; AVOID LOCATING CLEATS AT FLOAT JOINTS.
5. ALL CLEATS ARE TO BE SAWNWOOD
6. VINYL CUSH BUMPER TO BE PREMIER RNR-5008 (GREY) - TO BE INSTALLED CONTINUOUS IN SUBS. DURING FIELD ASSEMBLY/INSTALLATION (NOT TO BE DONE DURING SUBSSEMBLY BY SUB).
7. ALL CORNER BUMPERS ARE TO BE 1" STANDARD GREY VINYL.

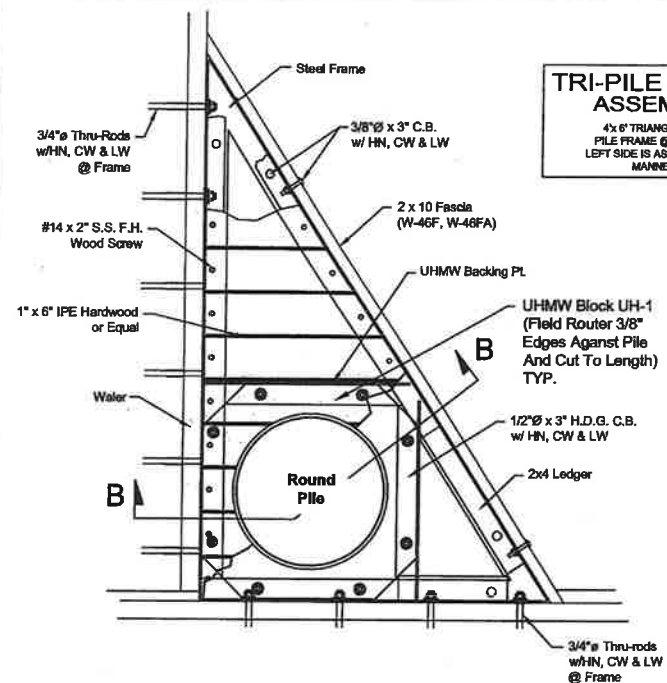
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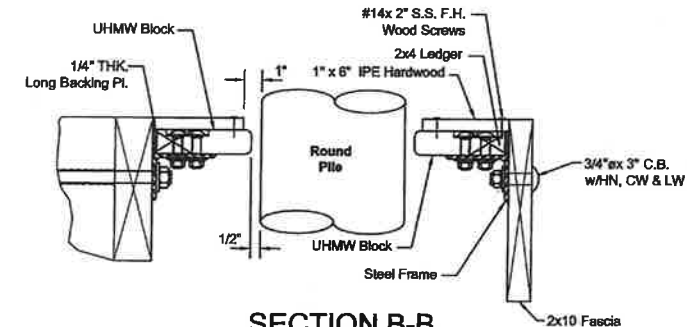
**TRI-FRAME ASSEMBLY**  
4x 6\"/>



**SECTION A-A**



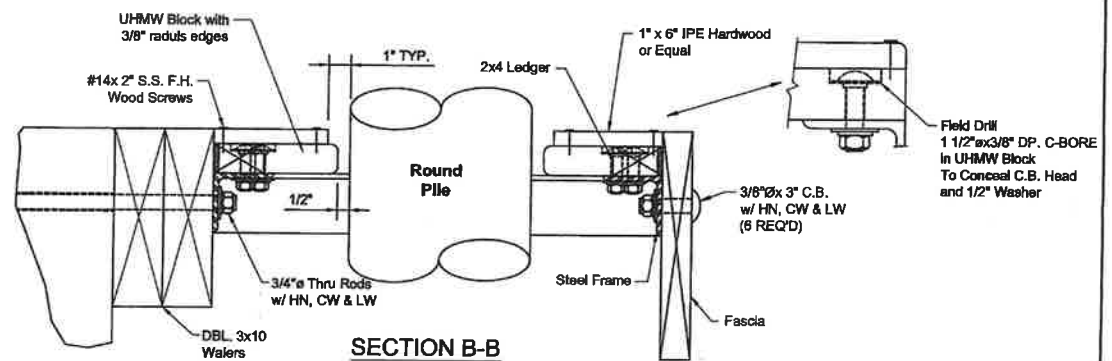
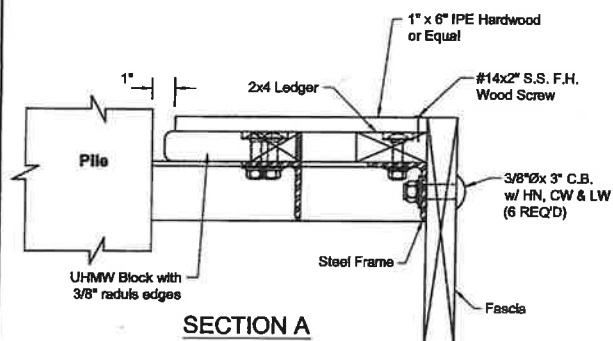
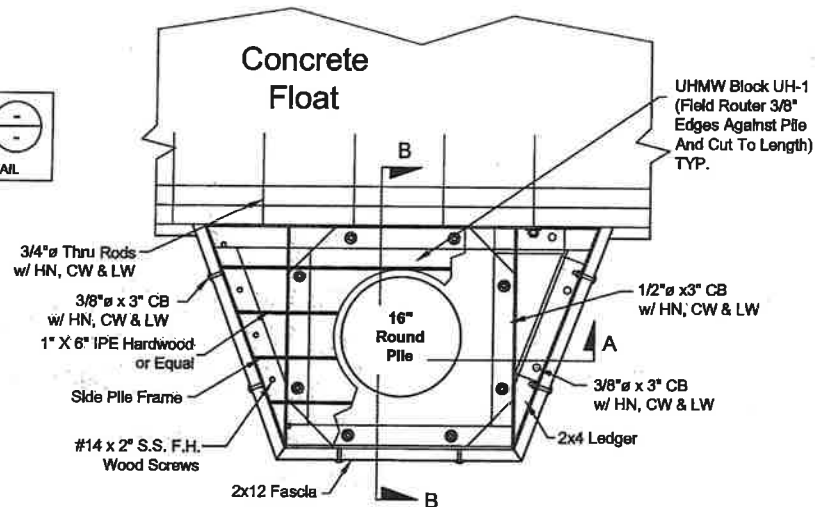
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**SECTION B-B**

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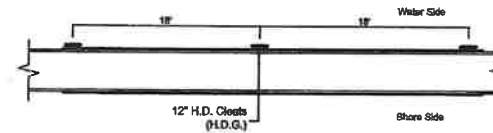


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			PROJECT MANAGER			<b>TYP. Assembly Details</b>		<small>The Bellingham Uniform program is a trademark of the Bellingham Uniform Corporation, a division of Bellingham Marine Construction, Inc. and is not to be used for any other purpose without the written consent of Bellingham Marine Construction, Inc. All dimensions and materials are subject to change without notice. The user assumes all liability for the use of these drawings.</small>		DATE: 06-03-02	
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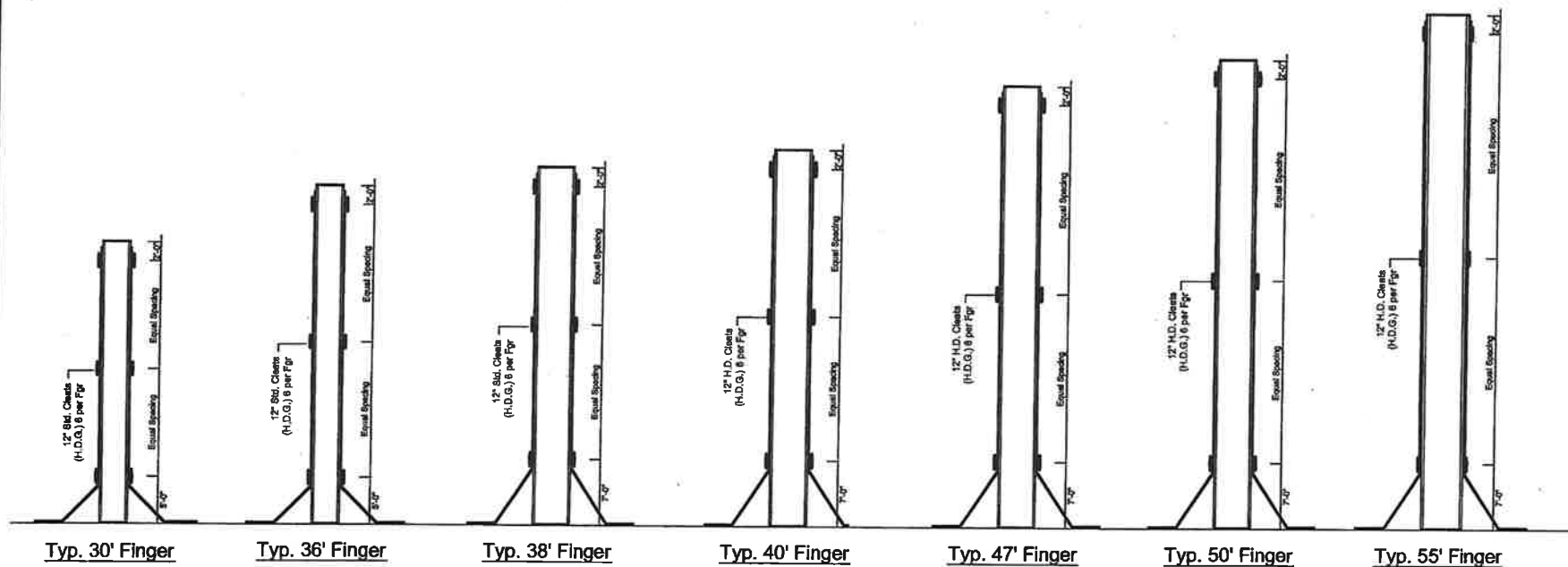
**Notes:**

1. All End Tie Fingers To Have 15" H.D. Cleats.
2. Cleat Spacing At End Ties to Match Adjacent Finger of the Same Length

**CLEAT SIZES AND LOCATIONS**

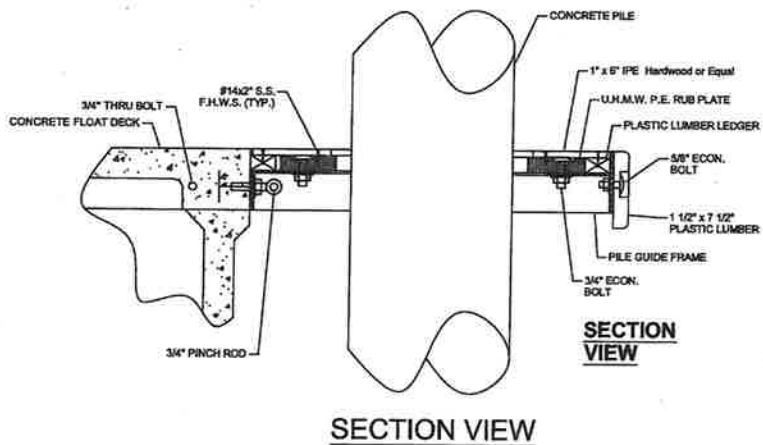


**Typ. @ Side Ties**

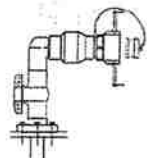


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Sewage Hydrant (40 ea.)

322' Suction Piping  
8 Ea. Hydrants

B Dock

A Dock

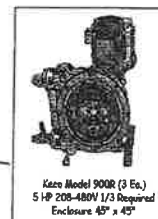
250' Suction Piping  
7 Ea. Hydrants



True Union Electric Actuated  
Ball Valve 2" (3 ea.)

2"Ø HDPE  
Suction Pipe

Pump is Powered from  
This Substation (SS-B1)



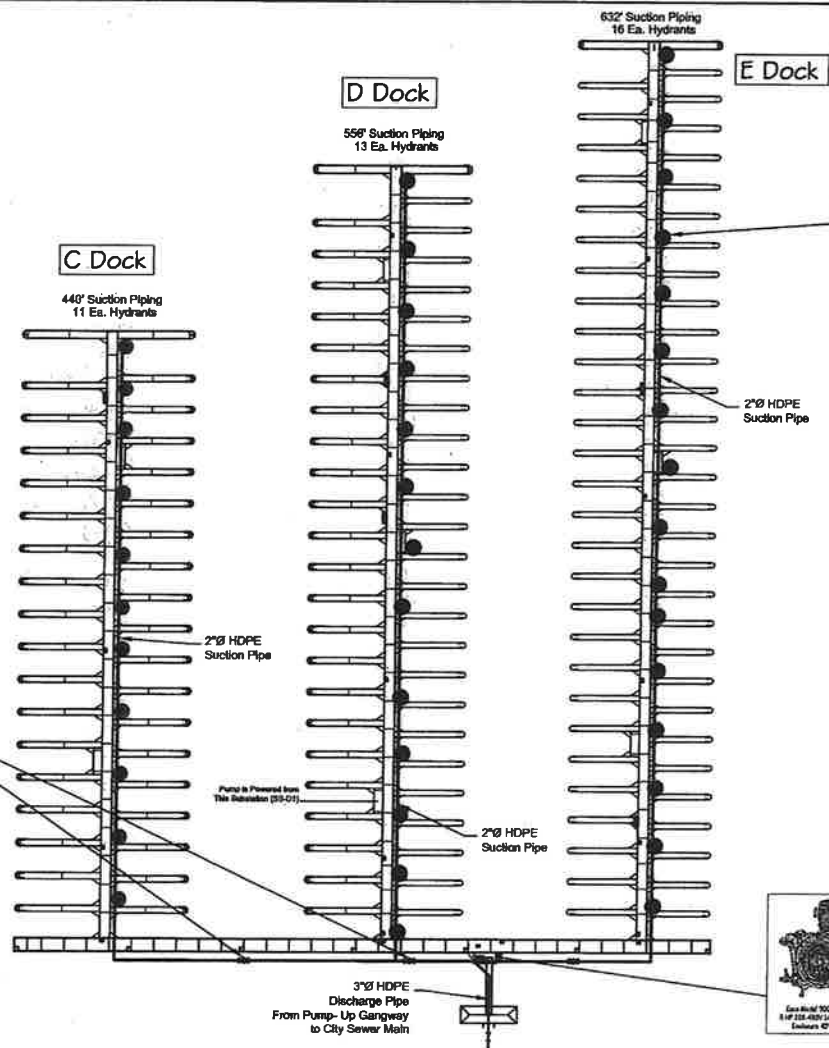
Kase Model 900R (3 Ea.)  
5 HP 208-480V 1/3 Required  
Enclosure 45" x 45"

3"Ø HDPE  
Discharge Pipe  
From Pump- Up Gangway  
to City Sewer Main

NO. DATE 12-28-06 11-08-07	REVISIONS Sewer System Submittal- Revised Submittal Sewer System Submittal- First Submittal	Project Number: <b>06-3-442</b> Project Manager	Westpoint Marina Redwood City, Ca. Sewer System Layout- A & B Docks	Bellingham LBS-FLOW Sewer System Layout and Submittal	Scale: As Shown Drawn By: E. Haddad Checked By: [Signature] Date: 11/08/07 Sheet: 1 OF 4 Stationing: SS1	City Of Redwood City
----------------------------------	---	---	---	---	---	----------------------



True Union Electric Actuated Ball Valve 2" (3 ea.)



NO.	DATE	DESCRIPTION	BY
1	12-28-95	Sewer System Submittal-Second Submittal	DCM
2	11-6-97	Sewer System Submittal-First Submittal	DD

REVISIONS

Project Number:  
**06-3-442**

PROJECT MANAGER

**Westpoint Marina**  
Redwood City, Ca.

**Sewer System Layout- C, D & E Docks**



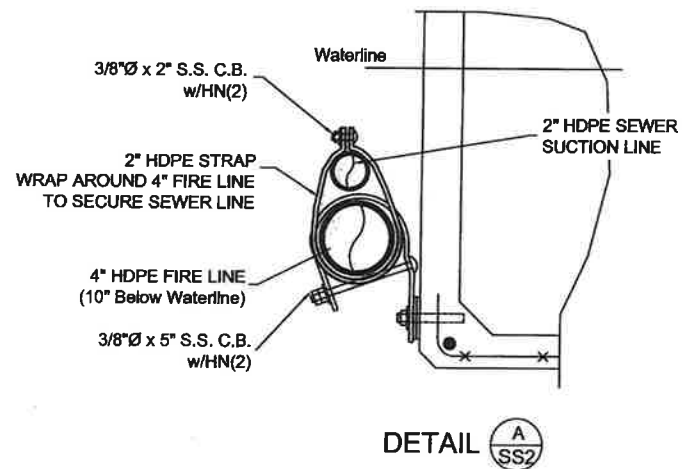
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DATE	11-6-97	BY	DD
DATE	12-28-95	BY	DCM
DATE	11-6-97	BY	DD
DATE	12-28-95	BY	DCM
DATE	11-6-97	BY	DD

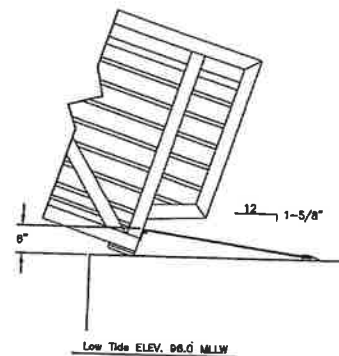
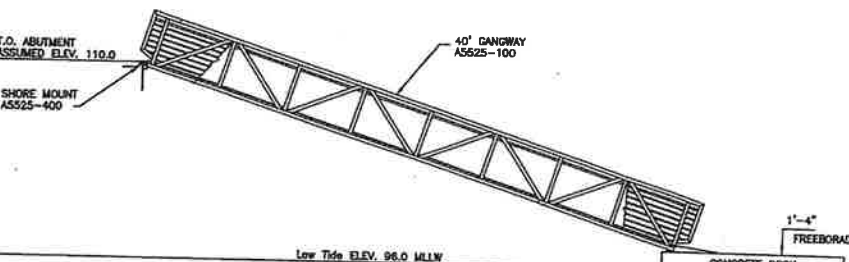
City Of Redwood City

Sheet 2 OF 4

SS2

[illegible]

[illegible]



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ACCURACY OF DRAWINGS.



ELEVATION VIEWS  
4'(CLEAR) x 40' GANGWAY  
BMT (WESTPOINT MARINA)

A5525-050

PROPRIETARY DESIGNS AND DATA THAT ARE THE SOLE PROPERTY OF TOPPER INDUSTRIES, INC. ARE INCLUDED IN THIS DRAWING

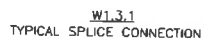
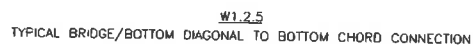
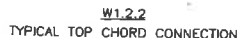
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**TEPPER**

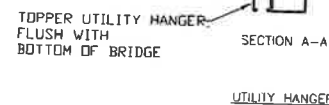
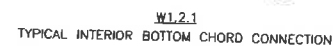
D. MEX 2439  
 BATTLE GROUND, VA 50604  
 360-687-1232 800-732-700X  
 FAX 360-687-5245 3625  
 NUSINES INC.

REL	DATE	BY	CHK	REVISION DESCRIPTION
0	10/19/06	SR	JG	INITIAL RELEASE





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[illegible]

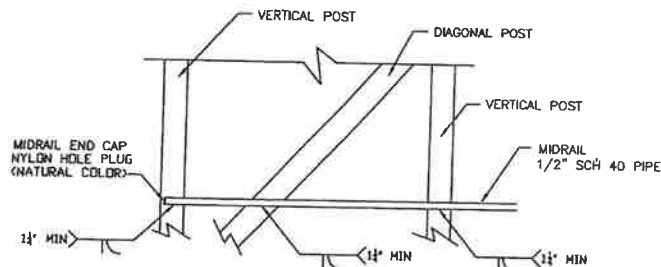
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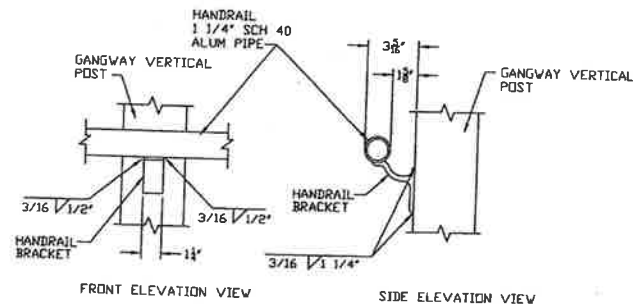
P. O. BOX 2439  
ATTLE CROOND, VA 98604 FAX 360-687-0349  
360-687-1832 800-332-00CK 3625

DETAILS D3, W1.2.1, G3  
W1.2.2, W1.2.5,  
W1.3.1 AND UTILITY HANGER  
BM(WESTPOINT MARINA)

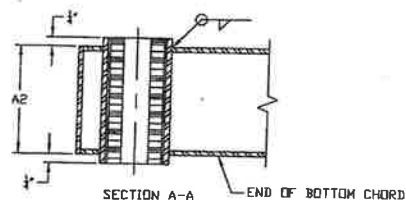
A5525-210



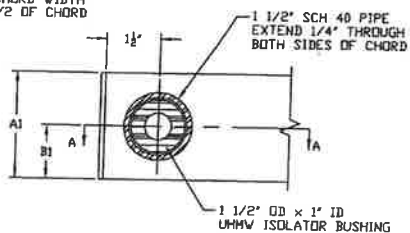
TYPICAL MIDRAIL WELDMENT DETAILS



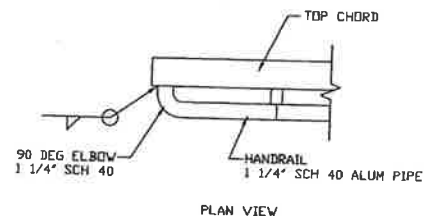
TYPICAL HANDRAIL WELDMENT DETAILS



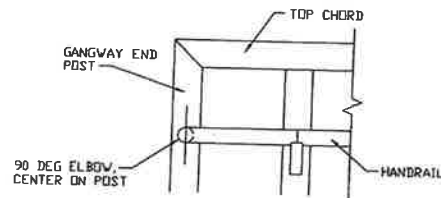
A1 = CHORD HEIGHT  
A2 = CHORD WIDTH  
B1 = 1/2 OF CHORD



TYPICAL BOSS DETAILS



PLAN VIEW



TYPICAL HANDRAIL RETURN DETAILS

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TOPPER  
INDUSTRIES INC.  
P. O. BOX 8429  
SMITHS CREEK, VA 98604  
360-487-3231 800-332-3064  
FAX 360-487-1345

MIDRAIL, HANDRAIL, BOSS  
DETAILS  
BMICWESTPOINT MARINA)

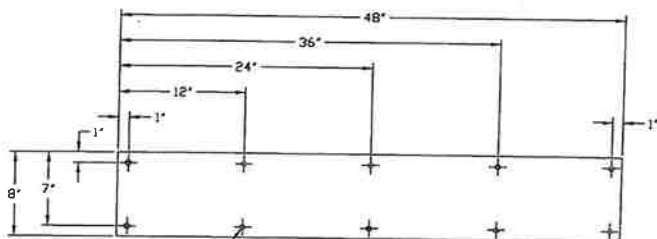
A5525-220

G4

NO.	DATE	BY	CHK	REVISION DESCRIPTION
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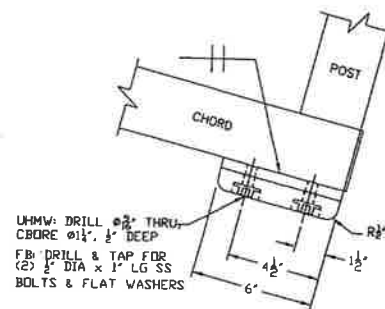


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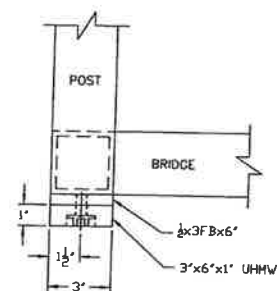


DRILL AND COUNTERSINK  
FOR #10 FH SCREW

RUN OFF PLATE  
8x6F 8x4'-0"  
(2) REQUIRED



UHMW SKID DETAILS  
WATER END



NOTE: DIMENSIONS DO NOT INCLUDE END CAPS.

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INDUSTRIES, INC.

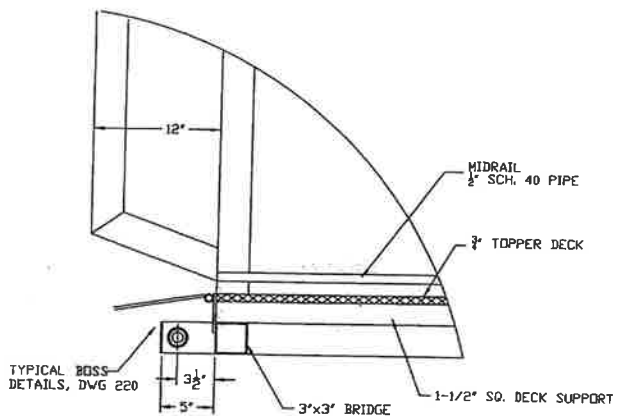
240-887-8822 800-338-0005  
P.O. BOX 8439  
BATTLIE GROUNDS, VA 98604 FAX 360-887-9345

UHMW SKID , RUN OFF  
PLATE  
BAYVIEW MARINA

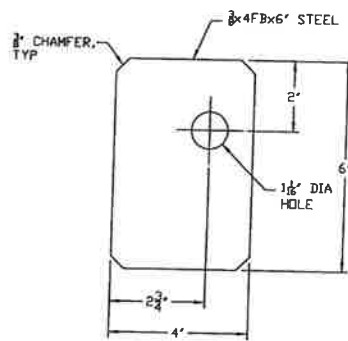
GL

A5525-310

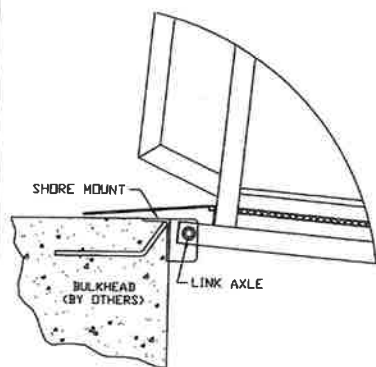
NO.	DATE	BY	CHK	REVISION DESCRIPTION
0	10/19/06	BR	JR	INITIAL RELEASE



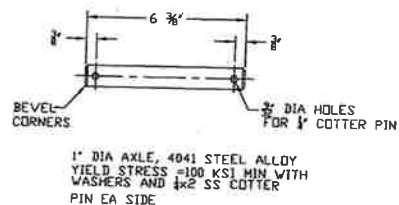
SHORE END DETAILS



DETAIL A  
(4) REQUIRED

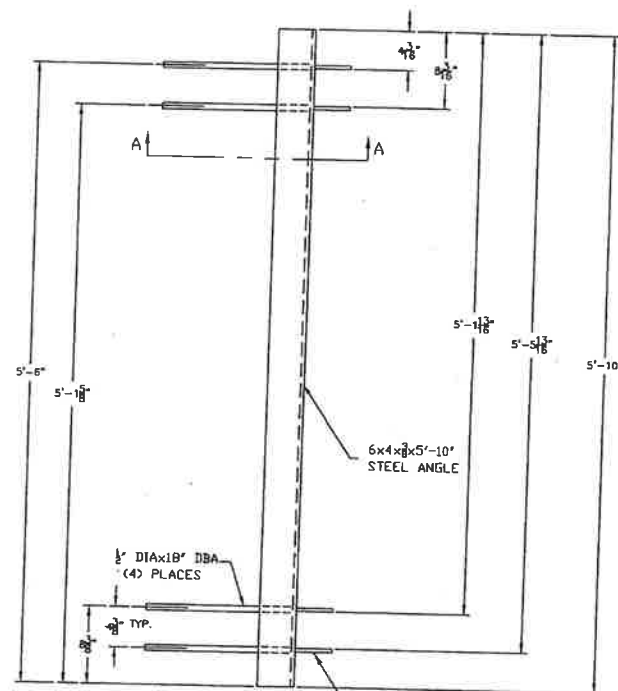


SHORE MOUNT ASSEMBLY

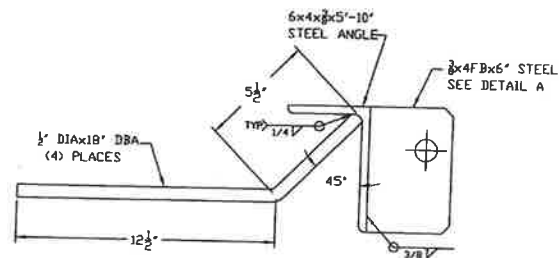


LINK AXLE  
1\"/>

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SHORE MOUNT PLAN VIEW



SECTION A-A

NOTE: GALVANIZE STEEL TO ASTM A123.

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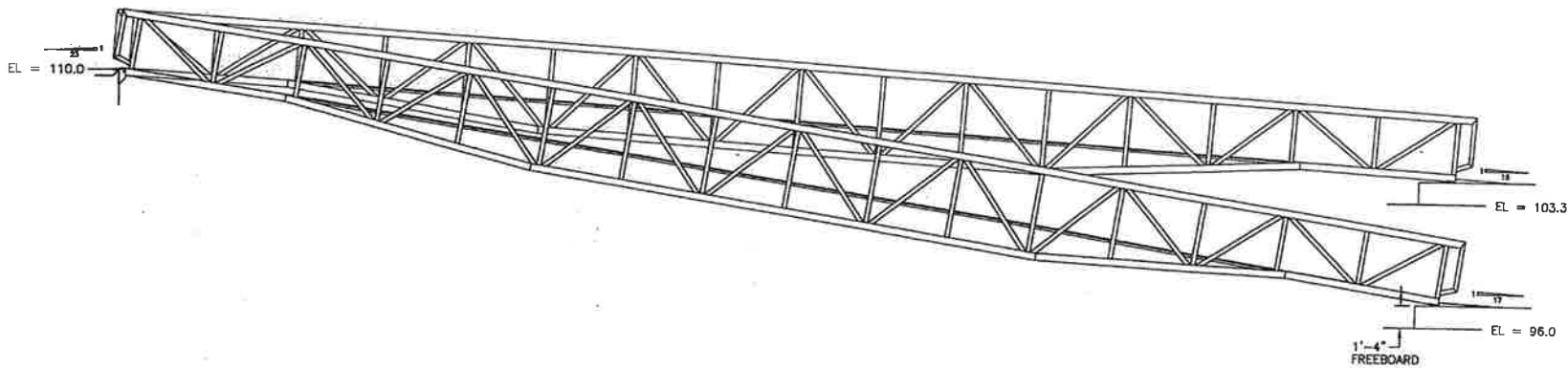
P. O. BOX 2439  
360-487-6239 800-330-1965  
BATTLE GROUND, VA 22604 FAX 360-487-0345

SHORE MOUNT FOR 40'  
GANGWAY  
BM(WESTPOINT MARINA)

G7

A5525-400

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4' (CLEAR) x 80' GANGWAY  
 AT HIGH AND LOW WATER  
 BML - WESTPOINT MARINA

G-8

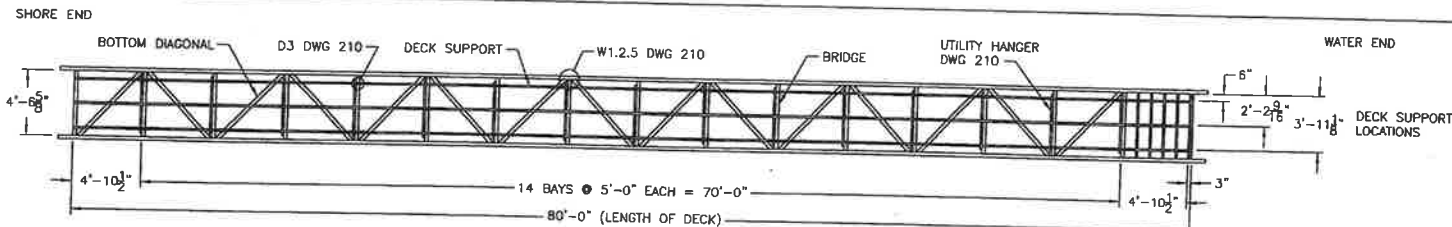
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**TOPPER INDUSTRIES INC.**  
 P. O. BOX 2439  
 SMITHFIELD, VA 22804

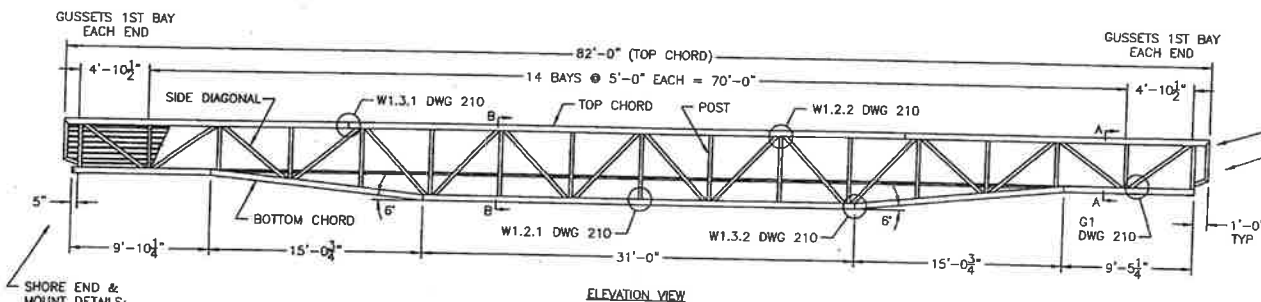
360-887-1332 800-332-0000  
 360-887-1346 FAX

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PLAN VIEW  
(HANDRAILS, MIDRAILS & DECKING NOT SHOWN)



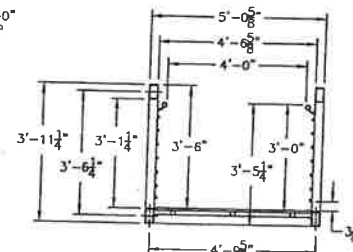
ELEVATION VIEW

SHORE END &  
MOUNT DETAILS:  
DWG 400  
TRANSITION PLATE:  
DWG 310

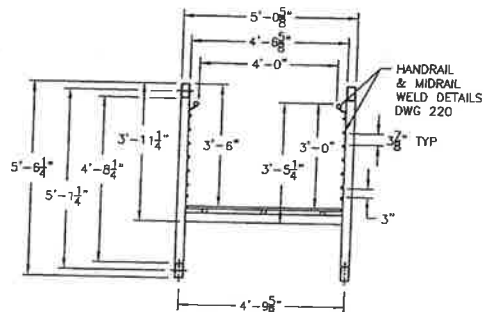
MFG. TAG  
MFG. DATE  
MFG. NO.  
LIVE LOAD

BOTH ENDS

WATER END DETAILS:  
DWG 300  
TRANSITION PLATE:  
DWG 310



SECTION A-A



SECTION B-B

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#### FABRICATION NOTES:

1. ONLY DECK IS SANDBLASTED.
2. DIMENSIONS DO NOT INCLUDE END CAPS.
3. END CAPS TO BE THICKNESS OF CHORD WALL.

#### GENERAL STRUCTURAL NOTES

CODE REQUIREMENTS:

CONFORMS TO UBC.

TEMPORARY CONDITIONS:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR STRUCTURAL STABILITY DURING CONSTRUCTION. THE STRUCTURE SHOWN ON THE DRAWINGS HAS BEEN DESIGNED FOR STABILITY IN THE FINAL CONFIGURATION ONLY.

DESIGN LOADS:

IN ADDITION TO THE DEAD LOADS, THE FOLLOWING LOADS AND ALLOWABLES WERE USED FOR THE DESIGN:

GANGWAY LIVE LOAD: 100 PSF  
GANGWAY DEAD LOAD: 20 PSF

STRUCTURAL MATERIAL:  
ALL SHAPES TO BE ALUMINUM 6061-T6.

STEEL  
PLATES: ASTM A36  
HSS: ASTM A500 GRADE B  
Fy = 46 KSI  
GALVANIZING: ASTM A123

FABRICATION SHALL BE IN ACCORDANCE WITH THE AA SPECIFICATIONS FOR ALUMINUM STRUCTURES. WELDING SHALL CONFORM TO THE AWS USING FILLER ALLOY 5356.

PREQUALIFIED WELDING PROCEDURES SHALL CONFORM TO ANSI/AWS D1.2-97 AND ANSI/AWS D1.1-98.

UHMW INDICATES ULTRA HIGH MOLECULAR WEIGHT POLYETHYLENE.

#### COMPONENTS

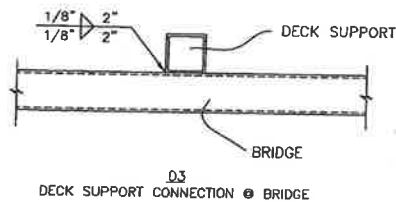
TOP CHORDS	3x5x0.250 ALUM TUBE
BOTTOM CHORDS	3x5x0.250 ALUM TUBE
POSTS	3x3x0.125 ALUM TUBE
SIDE DIAGONALS	3x3x0.125 ALUM TUBE
BRIDGES	3x3x0.125 ALUM TUBE
	1 1/2 x 1 1/2 x 0.125 ALUM TUBE
BOTTOM DIAGONALS	3x3x0.125 ALUM TUBE
DECK SUPPORTS	1 1/2 x 1 1/2 x 0.125 ALUM TUBE
HANDRAIL	1" SCH 40 ALUM PIPE
MIDRAILS	1" SCH 40 ALUM PIPE
DECK	1" TOPPER (SANDBLASTED)

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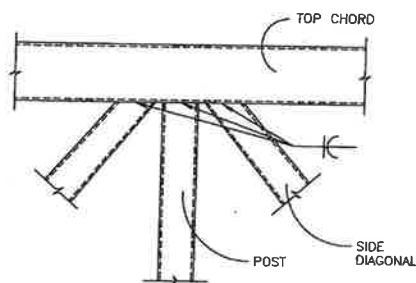
**TOPPER**  
INDUSTRIES, INC.  
300-697-1232 800-332-0066  
P.O. BOX 2128  
BATTLE CREEK, MI 48804

4' (CLEAR) x 80' GANGWAY  
PLAN, ELEVATION AND  
SECTION VIEWS  
BMI - WESTPOINT MARINA

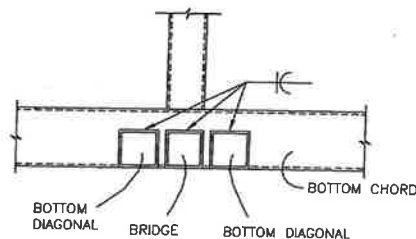
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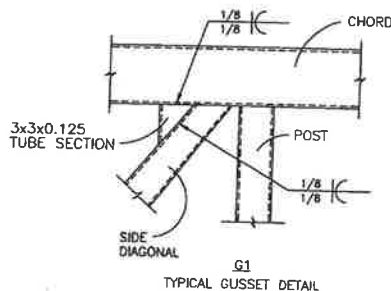
D3  
DECK SUPPORT CONNECTION TO BRIDGE



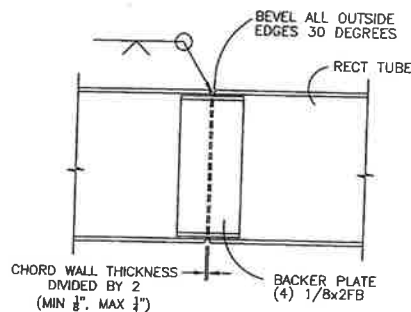
W1.2.2  
TYPICAL TOP CHORD CONNECTION



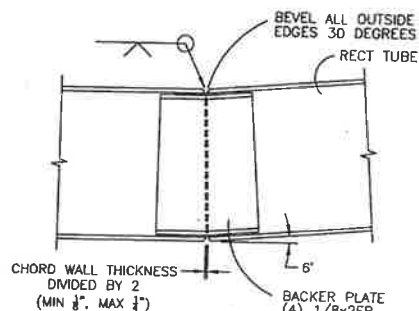
W1.2.5  
TYPICAL BRIDGE/BOTTOM DIAGONAL TO BOTTOM CHORD CONNECTION



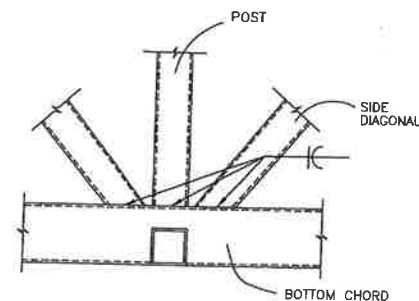
G1  
TYPICAL GUSSET DETAIL



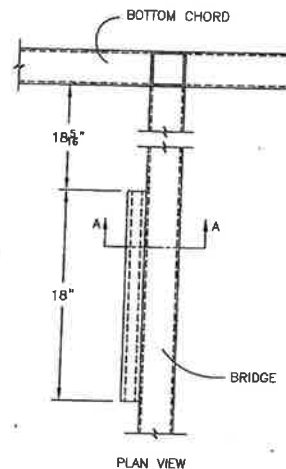
W1.3.1  
TYPICAL TOP CHORD  
SPICE CONNECTION



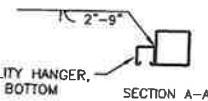
W1.3.2  
TYPICAL BOTTOM CHORD  
SPICE CONNECTION



W1.2.1  
TYPICAL INTERIOR BOTTOM CHORD CONNECTION



PLAN VIEW



UTILITY HANGER



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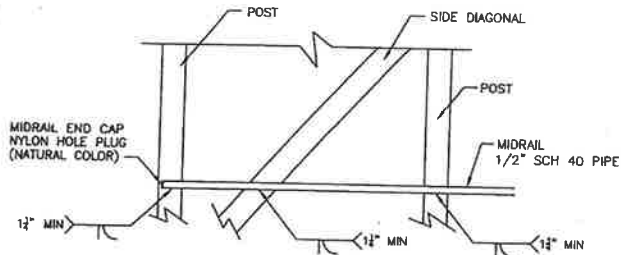
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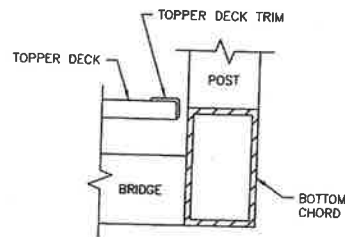
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P.O. BOX 2438  
BATTLE GROUND, WA 98604  
360-887-1232 800-332-005X  
FAX 360-887-0245 3629

4' (CLEAR) x 80' GANGWAY  
DETAILS D3, G1, W1.2.1,  
W1.2.2, W1.2.5, W1.3.1, W1.3.2  
AND UTILITY HANGER  
BMI - WESTPOINT MARINA

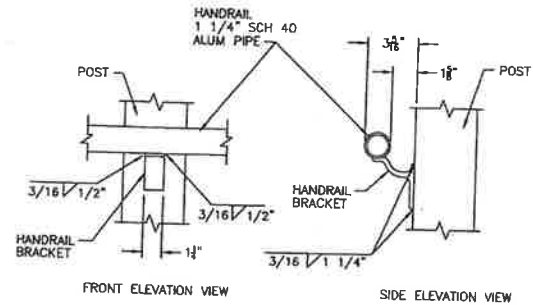
B5525-210



TYPICAL MIDRAIL WELDMENT DETAILS

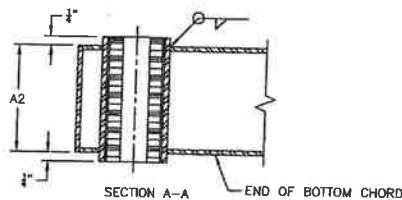


SECTION VIEW  
DECK TRIM DETAILS

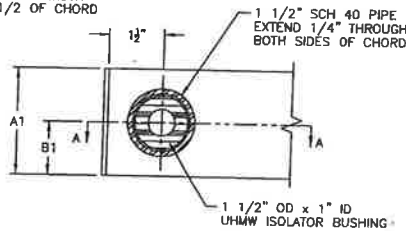


TYPICAL HANDRAIL WELDMENT DETAILS

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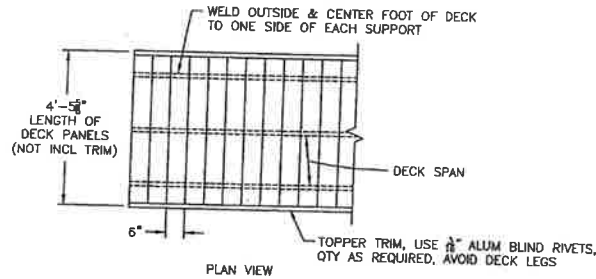


A1 = CHORD HEIGHT  
A2 = CHORD WIDTH  
B1 = 1/2 OF CHORD

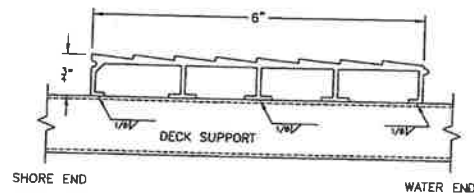


SIDE ELEVATION VIEW

TYPICAL BOSS DETAILS

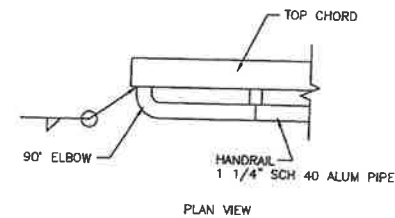


PLAN VIEW

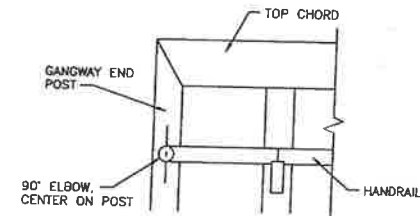


SIDE ELEVATION VIEW

TOPPER ALUMINUM DECK  
WELDING DETAILS



PLAN VIEW



ELEVATION VIEW

HANDRAIL RETURN DETAILS

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FAX 360-887-0345

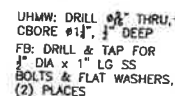
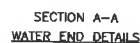
4' (CLEAR) x 80' GANGWAY  
TYPICAL BOSS, HANDRAIL  
MIDRAIL AND DECK DETAILS  
BMT - WESTPOINT MARINA

B5525-220

NO.	DATE	BY	CHK	APP	REVISION DESCRIPTION
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1. END CAPS NOT SHOWN.
2. END CAPS TO BE THICKNESS OF CHORD WALL.
3. HANDRAIL & MIDRAILS TO RUN PARALLEL WITH INCLINED DECK.



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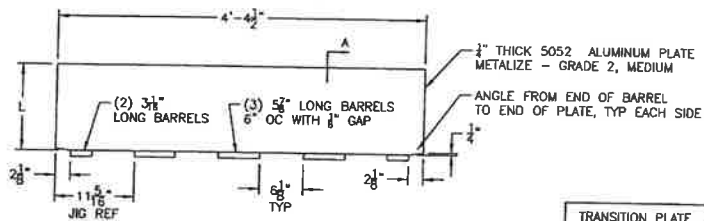
**FEAR**

P. O. BOX 2439  
ATTLE GROUND, WA 98604  
360-687-1232 800-332-DOCK  
FAX 360-687-0345 3625

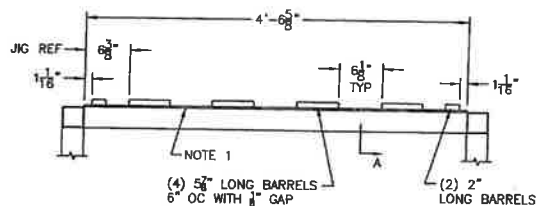
4' (CLEAR) x 80' GANGWAY  
WATER END DETAILS  
BMI - WESTPOINT MARINA

85525-300

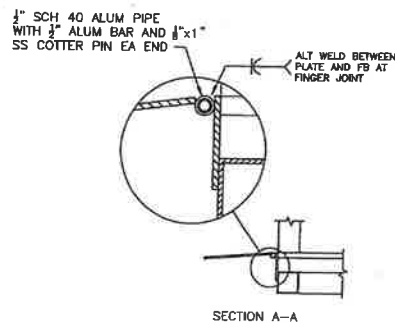




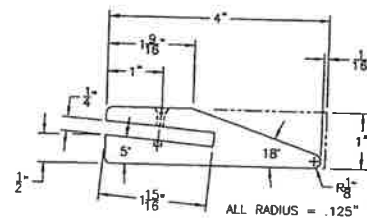
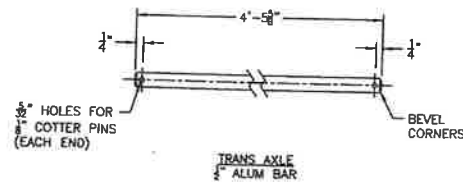
TRANSITION PLATE	L
SHORE END	1'-0"
WATER END	3'-0"



PLAN VIEW



TRANSITION PLATE DETAILS



TRANSITION PLATE NOSE DETAILS  
(WATER END ONLY)

MATERIAL: 1"x4" UHMW  
FASTEN WITH 1/2"-20 FLAT  
HEAD SS SCREWS AT 6" OC

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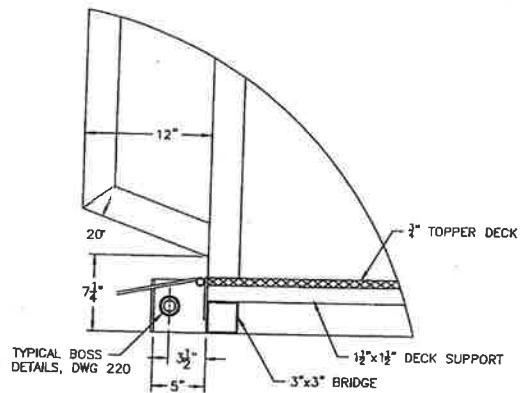
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360-897-1335

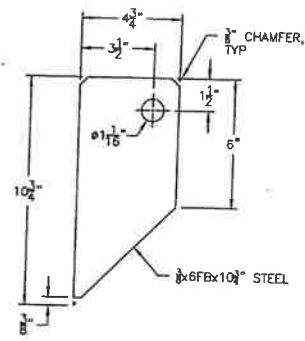
4' (CLEAR) x 80' GANGWAY  
TRANSITION PLATE DETAILS  
BMI - WESTPOINT MARINA  
G-13

B5525-310

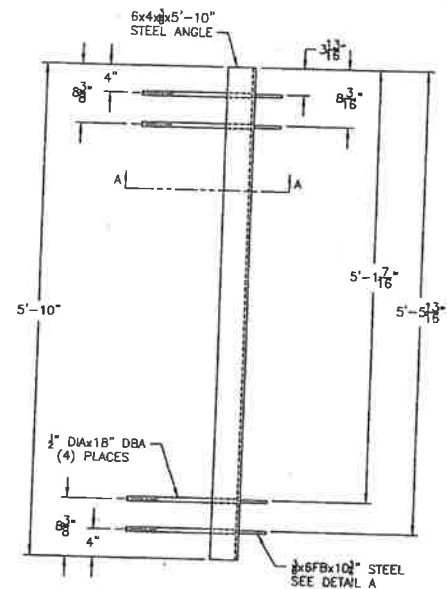
NO.	DATE	BY	CHK	APP	REVISION	DESCRIPTION
0	10/23/09	JS	SN	SL		INITIAL RELEASE



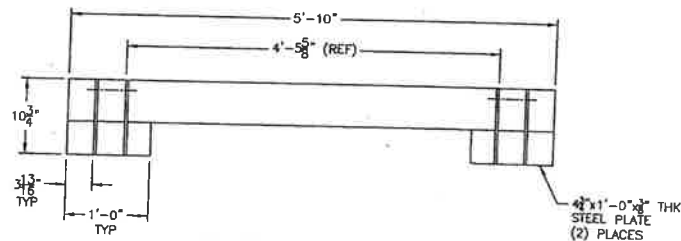
SHORE END DETAILS



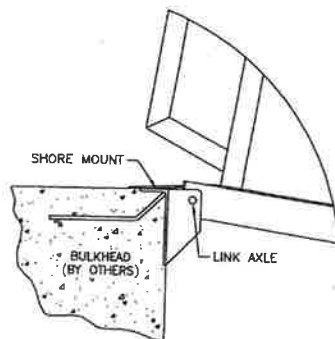
DETAIL A  
(4) REQUIRED



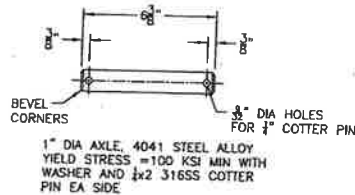
SHORE MOUNT PLAN VIEW



SHORE MOUNT FRONT ELEVATION VIEW

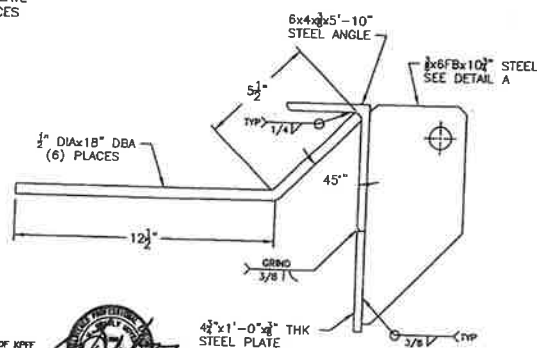


SHORE MOUNT ASSEMBLY



LINK AXLE  
1\"/>

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INDUSTRIES INC.  
P.O. BOX 2439  
BATTLE GROUND, WA 98604  
360-687-1232 800-332-0055  
FAX 360-687-0245

4' (CLEAR) x 80' GANGWAY  
SHORE MOUNT DETAILS  
BMT - WESTPOINT MARINA  
G 14

B5525-400

NO.	DATE	BY	CHK	APP	REVISION DESCRIPTION
0	10/23/06	JS	SR	SL	INITIAL RELEASE

Tom Sinclair

Thursday, June 16, 2011 2:58 PM

---

**Subject: Electronic Files**

**Date:** Tuesday, June 14, 2011 10:56 AM

**From:** Mark Sanders <mark@westpointharbor.com>

**Reply-To:** <mark@westpointharbor.com>

**To:** Tom Sinclair <toms@bcd.c.ca.gov>, "mark@westpointharbor.com" <mark@westpointharbor.com>

Hello Tom,

In the distant past I provided AutoCad files on disk for construction drawings at Westpoint Harbor (in addition to the hard copies), but BCD C did not have the ability to read AutoCad (the exception was the DRB). I only have "job site" copies of the drawings which are wet-stamped for Redwood City, so I made a new disk with drawings in PDF format so you can easily use them. I posted the **Site Preparation Drawings** and the **Harbor House drawings** on the disk today to your attention. You will notice the Site Prep drawings are "as-built" drawings provided by the contractor.

The **Dock Drawings** (titled "Westpoint Marina") are more complicated and Bellingham Marine is converting them to PDF files now, and will post them so they can be accessed electronically. I expect that will take a day or two.

mark

LETTER FROM MARK SANDERS DATED MAY 26, 2011, RE: WESTPOINT MARINA  
BCDC ENFORCEMENT FILE NO. ER2010-013  
BCDC AMENDED PERMIT FILE NO. 2-02

12 PAGE COVER LETTER.

ATTACHMENTS TO LETTER:

ATTACHMENT A	2 Pages Stapled
ATTACHMENT B	1 Page
ATTACHMENT C	1 Page
ATTACHMENT D	3 Pages Stapled
ATTACHMENT E	1 Page
ATTACHMENT F	1 Page
ATTACHMENT G	1 Page
ATTACHMENT H	1 Page
ATTACHMENT I	6 Pages Stapled
ATTACHMENT J	1 Page
ATTACHMENT K*	2 Pages Loose
ATTACHMENT K*	2 Pages Stapled
ATTACHMENT L	2 Pages Stapled
ATTACHMENT M	2 Pages Stapled
ATTACHMENT N	1 Page
ATTACHMENT O	2 Pages Stapled
ATTACHMENT P	2 Pages Stapled
ATTACHMENT Q	2 Pages Loose
ATTACHMENT R	2 Pages Loose

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